

AGRICULTURAL OUTLOOK

Economic Research Service
United States Department of Agriculture

September 1991

Domestic
Production

A
New Farm
Safety Net

AGRICULTURAL OUTLOOK

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News of Weather Impacts, Corn and Soybean Output, Soviet Import Policy, and Canada's New Farm Safety Net

Weather is figuring prominently in this year's U.S. crop outlook. This month's *Agricultural Outlook* reports on this and other major sources of variability in commodity prices and farm income, as well as some stabilizing factors at work in the policy arena illustrated by the CRP for U.S. producers and Canada's new GRIP program.

Dry weather, particularly in the eastern Corn Belt, stressed the corn and soybean crops during July and early August, causing crop conditions to deteriorate substantially. Acreage for both crops is up compared with 1990/91, but because of lower yield prospects, production is expected to decline, and prices are projected up over last year's levels.

Weather is also a major factor in a second successive year of strong fruit prices—both for growers and at the retail level—as the effects of last December's freeze continue. In contrast to corn, soybeans, and fruits, the U.S. cotton crop is projected to be the largest since 1937, and the U.S. sugar crop may reach a record high this year—7.3 million tons. A recovery in Louisiana sugar acreage of 41 percent will contribute to a 5.3-percent increase in U.S. harvested acreage.

Deteriorated crop conditions have caused uncertainty in feed markets, which will affect livestock and poultry producers. Continuing uncertainty about feed costs could erode the high rate of herd expansion predicted earlier by the June *Hogs and Pigs* report and covered in last month's *Agricultural Outlook*.

The second half of 1991 is likely to see larger commercial beef production, greater hog production, and lower prices for both. Consumers can expect some relief from last year's retail price in-



creases of 8-15 percent for meats, to a more moderate 1-4 percent as the larger production moves to retail markets.

Weather isn't the only factor creating uncertainty for grain producers. Over the past 20 years, the USSR has become a major market for U.S. grain as well as a tremendous source of variability for U.S. exports. And recently, the Soviets have increasingly sought U.S. export assistance.

The Conservation Reserve Program (CRP) provides a source of income stability to producers when they enroll highly erodible land in the program for a period of 10-15 years. The importance of income stability is enhanced when fallow land that generates no income in some years is enrolled in the CRP.

The contents of this month's issue of *Agricultural Outlook* were prepared prior to the recent events that took place in the Soviet Union.

However, when the source of farm income changes from crop sales to CRP rental payments, and farmers reduce expenditures for inputs such as fertilizer and fuel, local economies can be affected. In most areas, the effects are minor when farming is a small sector in a diversified local economy. But in areas of high farm dependency and large CRP enrollment, the effect of altered spending patterns is likely to be more pronounced.

Canada's new GRIP program—the Gross Revenue Insurance Plan—is receiving considerable attention this year. The GRIP program provides a safety net in the form of revenue support to producers of grains and oilseeds when prices or yields are low. Early indications point to high enrollment by crop producers in the Prairie Provinces.

The U.S. economy appears to be recovering from the recent recession. By the end of July, the index of leading indicators had risen for 5 months, employment had stabilized, and real GNP had grown for the first time since the third quarter of 1990—all signs favoring economic recovery. With off-farm income important to many farmers, trends in the rural and urban nonfarm job markets are watched closely by economists and policymakers.

Despite recent economic indicators, the economy is still operating at low levels, and although employment has stabilized, unemployment is still relatively high. Prospects for a less-than-robust recovery are reflected in a July survey of rural appraisers, who expect more modest increases in farmland values in the coming 12 months. Appraisers expect an average increase of less than 1 percent for U.S. farmland values during July 1991-92, compared with a reported increase of about 3 percent over the past 12 months.

Agricultural Economy



Field Crops Overview

Dry conditions in the U.S., particularly in the eastern Corn Belt, stressed the corn and soybean crops during July and early August, causing crop conditions to deteriorate substantially. Acreage for both crops is up compared with 1990/91, but because of lower yield prospects, corn production is expected down about 6.5 percent and soybean production down almost 3 percent from a year earlier.

Foreign corn production is projected at a record 281 million tons, up 4 percent from the 1990/91 crop. Foreign demand for corn continues to be weak in 1991/92 due to sharp competition from foreign barley and wheat. U.S. corn exports are projected down 6 percent from a year ago, and the U.S. corn market share is forecast to slip from 78 to 76 percent.

Despite reduced soybean yield prospects, U.S. crush is forecast at a record 1.2 billion bushels in 1991/92 and soy complex exports are expected to increase, in part because of a sharp decline in 1990/91 Brazilian production. Exports of domestic soybeans are projected up 9 percent.

Below-Normal Rainfall Stresses Corn Crop

U.S. corn yields for 1991/92 are projected at 107.8 bushels per acre, 9 percent below last year's 118.5 bushels. Production is forecast at 7.4 billion bushels, about 6.5 percent below last year, even though harvested area, at 68.8 million acres, is projected up almost 3 percent. Because of tighter supplies, prices for the season are likely to average \$2.30-\$2.70 per bushel, compared with \$2.30 last year.

As much of the corn crop entered its critical growing period in July, dry conditions, particularly in the eastern Corn Belt, stressed the crop and caused crop conditions to deteriorate significantly. As of August 18, 47 percent of the corn crop was rated excellent or good (compared with 76 percent last year), 36 percent was rated fair, and 17 percent poor or very poor. Conditions were particularly poor in Indiana, Ohio, and Pennsylvania, where 40 percent or more of the crop was rated poor or very poor.

The U.S. corn supply is projected at 8.95 billion bushels, about 4 percent less than 1990/91's 9.28 billion. Total disappearance is projected at 7.73 billion, leaving ending stocks of 1.23 billion bushels and a stocks-to-use ratio of 15.9 percent. The ending stocks-to-use ratio for 1990/91 is estimated at 19.7 percent.

With the sorghum crop also stressed by dry weather in many areas (except Texas), the projected yield, at 57.9 bushels per acre, is 5 bushels below 1990. Harvested area is forecast up over 664,000 acres, leaving this year's crop, estimated at 565 million bushels, slightly less than a year ago. But with low carryin stocks, supplies are down 9 percent. And although use will drop due to lower projected exports, ending stocks are projected 25 percent below 1990's estimated 157 million bushels.

Mainly because of the smaller corn crop, feed grain supplies in 1991/92 are expected to decline almost 4 percent from a year earlier, to 266.4 million metric tons. Total feed grain use is projected down slightly from a year earlier, resulting in a

drop in ending stocks of more than 9 million tons, and stronger prices expected for all feed grains.

Because of reduced feed grain supplies, feed use of wheat is expected to continue high, at least through the summer. Feed and residual use of wheat in 1991/92 is forecast at 350 million bushels, up 27 percent from July's estimate, but down from last year's estimated 492 million bushels.

U.S. Corn Exports & Market Share To Drop

Foreign coarse grain production in 1991/92, forecast at 582 million tons, is down from 1990/91's record of nearly 597 million. The drop in output will occur mainly in barley and rye and, to a much lesser extent, oats.

However, foreign corn production is projected at a record 281 million tons, up 4 percent from a year earlier. Foreign corn consumption is also projected up, offset by a sharp drop in barley consumption.

At 42 million tons, U.S. corn exports are projected down 6 percent, and U.S. market share is forecast to slip from 78 to 76 percent, the lowest since 1986/87. Weak foreign demand for corn due to sharp competition from foreign wheat and barley continues to be a problem for the U.S.

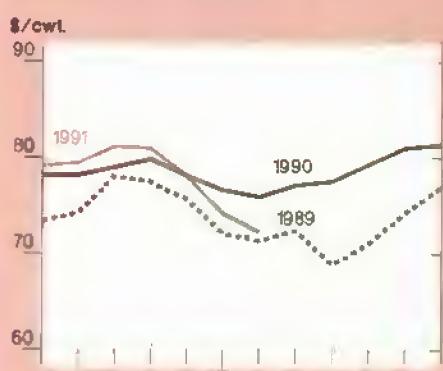
The USSR is expected to buy more barley at the expense of corn in 1991/92, reflecting large exporter supplies and the use of EC and Canadian export credits. Soviet barley imports are forecast at a record 6.5 million tons, pushing world barley trade to a record 18.6 million tons. In addition, imports of foreign feed wheat are expected to increase slightly from 1990/91, displacing corn imports, due to greater purchases by South Korea, again the primary import market for feed wheat.

Foreign corn exports are projected up 2 percent to 13 million tons. Although declines are projected for corn exports from South Africa and China, these will be offset by gains from the EC whose

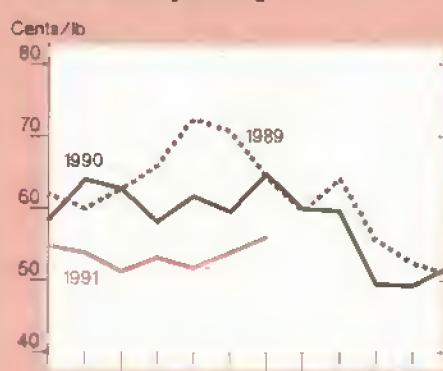
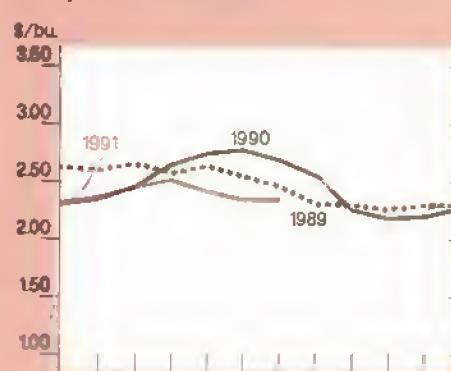
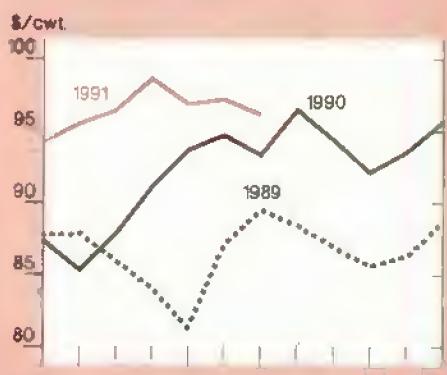
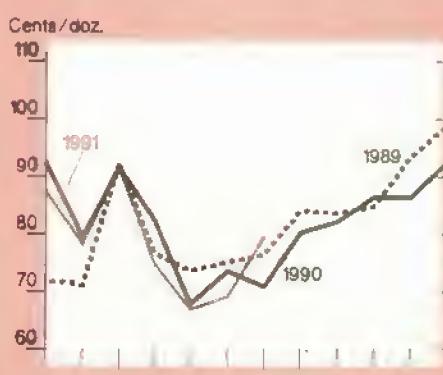
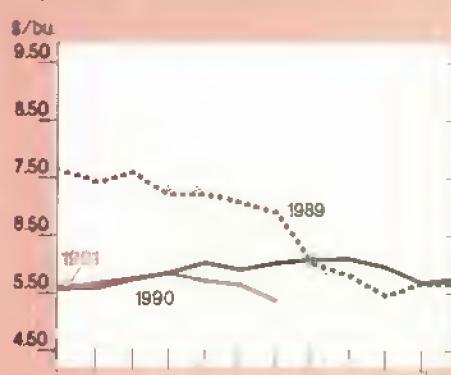
Commodity Market Prices

Agricultural Economy

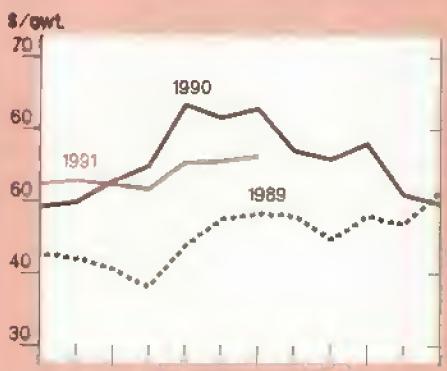
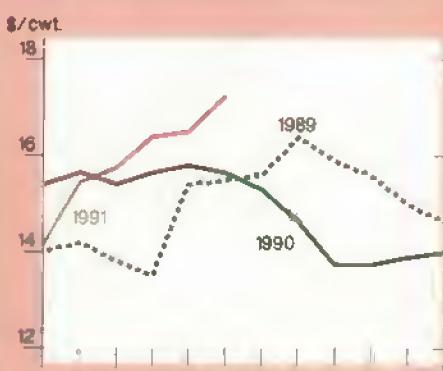
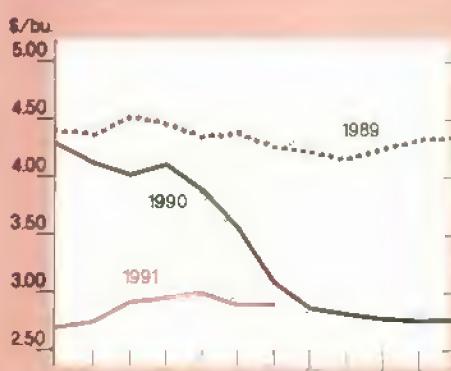
Choice steers, Nebraska



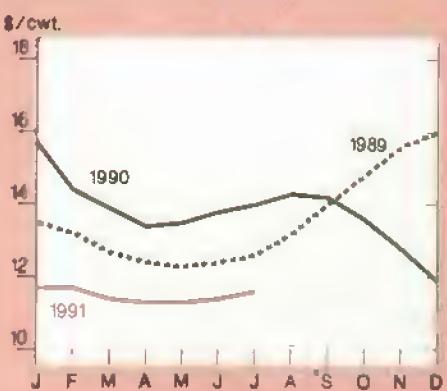
Broilers, 12-city average

Corn, Central Illinois¹Medium steers, Oklahoma City²Eggs, New York³Soybeans, Central Illinois⁴

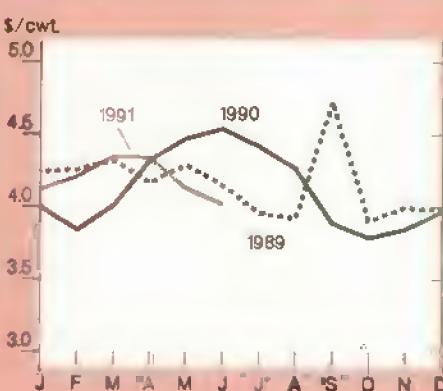
Barrows and gilts, 7 markets, Omaha

Milled rice, SW Louisiana⁵Wheat, Kansas City⁶

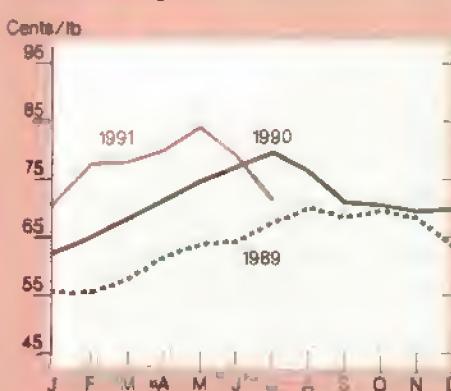
All milk



Sorghum, Kansas City



Cotton, average spot market

¹No. 2 yellow. ²600-700 lbs medium no. 2³Grade A large⁴No. 1 yellow.⁵U.S. No. 2 long-grain⁶No. 1 HRW.

Agricultural Economy

Weather Curtails U.S. Corn and Soybean Crops

	1989/90	1990/91	1991/92
	Million metric tons		
WORLD			
Wheat			
Production	538	593	551
Use	534	572	560
Exports	96	94	105
Ending stocks	121	142	132
Corn			
Production	461	470	469
Use	478	467	479
Exports	73	57	55
Ending stocks	71	75	65
Soybeans			
Production	107	103	104
Use	104	104	105
Exports	27	26	26
Ending stocks	20	19	18
UNITED STATES			
Wheat			
Production	55	75	55
Use	27	37	34
Exports	34	29	30
Ending stocks	15	24	16
Corn			
Production	191	202	188
Use	146	153	154
Exports	60	44	42
Ending stocks	34	39	31
Soybeans			
Production	52	52	51
Use	34	35	35
Exports	17	15	17
Ending stocks	7	9	8

Note: Exports of wheat and corn do not include intra-EC trade shipments. For trade data, the wheat year is July-June, and the soybean and corn years are October-September. Other data are on a U.S. marketing year basis, 1990/91 estimated, 1991/92 projected.

crop is expected to recover from a poor 1990/91 season. Exports from Argentina are projected up marginally, while Thailand's are expected to be unchanged.

U.S. Soybean Production Expected Down

Domestic soybean yields for 1991/92 are projected to be 31.8 bushels per acre, down 6.5 percent from a year earlier. Production is projected at 1.87 billion bushels, almost 3 percent below last year, even though harvested area is estimated up nearly 4 percent, to 58.7 million acres.

Like the corn crop, this year's soybean crop has been stressed by dry weather,

particularly in the eastern Corn Belt, and crop development has been ahead of normal. The weather caused soybean conditions to deteriorate during July and early August, but the decline was not as marked as for corn. Soybean demand for moisture occurs slightly later in the season, and soybean yields often recover more easily from mid-season dryness.

As of August 18, 42 percent of the crop was rated excellent or good, 41 percent fair, and 17 percent poor or very poor. At the same time last year, 56 percent fell within the excellent-or-good range. Conditions as of mid-August were particularly poor in Indiana, Kansas, Louisiana, Mississippi, and Ohio, where 25 percent or more of the crop was rated poor or very poor. Soybean prices for

the season are expected to average \$4.85-\$6.85, compared with \$5.75 last year.

Despite reduced yield prospects, 1991/92 crush is forecast at a record 1.2 billion bushels and soy complex exports are expected to increase, due partly to the 4.8-million-ton decline in 1990/91 Brazilian production. U.S. exports of soybeans are projected up 9 percent, soybean meal exports 6 percent higher, and soybean oil exports up 29 percent. Availability of export assistance will be an important determinant of U.S. soybean meal and soybean oil exports in 1991/92.

Because of the sharp drop in production, Brazil is expected to terminate soybean exports before September 1991 and is likely to import soybeans to meet domestic demand until its 1991/92 crop is harvested in the spring. These imports are expected to come primarily from the U.S., and could amount to 0.5 million tons in the 1991/92 season.

U.S. Wheat Production Forecast Down 26 Percent

U.S. wheat production is forecast at 2 billion bushels, down 26 percent from last year. Total area harvested is forecast at 58.1 million acres, a 16-percent drop from last year. This is mainly due to a sharply higher ARP, relatively low prices at planting time, and attractive cattle prices that encouraged grazing on area planted to wheat instead of harvesting for grain.

Projected 1991/92 production of the hard red spring and durum classes is down slightly from a year earlier, while projected hard red winter, white, and soft red winter production is down markedly. Hard red winter production, affected by dryness in the Southern Plains, is forecast at 889 million bushels, 26 percent less than 1990. White wheat production is forecast at 218 million bushels, down 30 percent from a year ago.

Production of soft red winter wheat is forecast at 335 million bushels, down 39 percent from a year earlier. The crop was affected by diseases such as glume

blotch, which keeps wheat heads from filling properly. Areas most affected by these diseases are southern Illinois, southern Indiana, and most of Missouri and Arkansas. Also affected are Georgia, east Texas, Kentucky, Ohio, North and South Carolina, Tennessee, and Virginia. As a result, average test weights for soft red, normally 57-58 pounds per bushel, will likely be lower.

Because of low test weights, purchasers of the soft red varieties are altering their standards. Some importers, such as China, have shifted from soft red into hard red winter wheat. A survey of 10 elevator companies suggests large discounts for each bushel under 54-55 pounds.

In contrast, many spring wheat and durum growers have enjoyed good soil moisture over much of the spring and summer. Yields of hard red spring and durum, harvested mostly in August, are estimated near record highs.

Largely because of lower production overall, the farm price for wheat is forecast at \$2.60-\$3.00 per bushel, compared with \$2.61 a year ago. Domestic wheat use is projected down about 8 percent, but exports are estimated up slightly, leaving total use down 3 percent. Total use will still exceed production, and wheat stocks are projected down almost 34 percent, at 574 million bushels.

The Export Enhancement Program and availability of additional credits will play an important role in maintaining U.S. exports. But the U.S. market share is expected to be off slightly in 1991/92, falling from 30 to 28 percent.

World Wheat Trade Likely To Rise

Foreign wheat production is projected at 495 million tons, more than 23 million tons below the 1990/91 record. Much of the drop is in China and the USSR, but

production in several other importing countries is up. Although output is projected down in Australia and Argentina, large carryin stocks in Canada and the EC, and greater production in the EC are keeping major competitors' supplies high. In addition, large crops are also expected among some smaller exporters, including some East European countries, Turkey, and Saudi Arabia.

Larger production among some importers is slowing growth of import demand. Imports in the key market of North Africa are expected to drop sharply. However, world wheat trade is forecast to expand 12 percent in 1991/92. But much of this growth depends on increased purchases by the Soviet Union and China.

Elsewhere, trade is projected to rise only 1 percent. Although a sharply reduced 1991 Soviet crop and lower state procurements may push total imports up, credit availability will remain critical, especially for exporter market shares.

Because of large supplies and available credit, Canada and the EC are projected to have record wheat exports in 1991/92. Smaller exporters are expected to boost shipments 33 percent, and exports from Argentina are also projected up. U.S. exports are forecast up slightly from the 1990/91 season, at 30 million tons, even though the U.S. market share will slip.

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Rice Production Expected Up

Domestic rice production in 1991/92 is forecast at 157 million cwt, up slightly from a year earlier, reflecting small increases in both harvested area and yield. Yields are pegged at 5,544 pounds per acre, while harvested area is estimated at 2.83 million acres, both up less than 1 percent from a year earlier. The increase in harvested area likely will occur in Arkansas and Missouri, offsetting declines in Louisiana, Mississippi, Texas, and California.

Unfavorably wet weather during the spring reduced plantings in parts of the Delta, while reduced supplies of water for irrigation due to the drought restricted plantings in California. Forecast yields are up in Arkansas and Missouri; down in Louisiana, Mississippi, and Texas; and unchanged in California.

U.S. rice supplies in 1991/92 are forecast at 188.7 million cwt, up 1 percent from a year earlier. With a projected 5-percent increase in domestic use and slightly lower exports, carryout stocks are expected to total 25.7 million cwt, slightly below a year earlier, and the fourth consecutive year of a stocks-to-use ratio below 17 percent.

U.S. Cotton Crop Largest Since 1937

Domestic cotton production for 1991/92, estimated at 17.6 million bales, is up 14 percent from last year, and the largest crop since 1937. The increase primarily reflects larger harvested area. Yields are estimated at 630 pounds per harvested acre, down slightly from last year, while harvested area is estimated at 13.4 million acres, up 14 percent from 1990/91. The acreage increase largely reflects a lower ARP and increased planting of cotton on flex acres.

Agricultural Economy

As of August 18, 92 percent of the cotton crop was setting bolls, only 2 percentage points below average. During July, the crop rating improved steadily, and 65 percent of the crop was rated good to excellent by August 18, compared with 51 percent last year.

Total use is expected to reach 15.8 million bales in 1991/92. Domestic mill consumption, projected at 8.8 million bales, is expected to exceed the 1990/91 level by 200,000 bales. Exports, however, are expected to be 7 million bales, down from the previous season's 7.9 million. U.S. ending stocks are projected at 4.1 million bales.

Recent higher prices have encouraged foreign production. Early projections place 1991/92 foreign cotton production at 73.5 million bales, 3 percent above a year earlier, and the second largest ever—just under the 1984/85 record. Much of the gain is anticipated in China and India, and Pakistan expects a record crop. Soviet cotton outturn is forecast below 1990/91 because of smaller planted area, although its yields may respond favorably to additional incentives.

Export competitors likely will consume more of their own rising production while still increasing exports. Foreign exports are forecast at 16.6 million bales, up 7 percent from a year earlier. With stronger competition, U.S. export share is expected to drop to a more normal 30 percent. [Joy Harwood (202) 219-0840 and Carolyn Whitten (202) 219-0824]

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Livestock, Dairy & Poultry Overview

The July 1 beef cow and beef replacement heifer inventories were up 2 and 4 percent from a year earlier. Commercial beef production is expected to expand 3 to 4 percent in the second half of 1991 from the low level of a year earlier due to a larger July 1 cattle-on-feed inventory.

Adverse weather during July increased the uncertainty about feed costs, which could dampen the herd expansion indicated in the June Hogs and Pigs report. Greater pork production and lower hog prices are likely late this year and in early 1992.

Commercial milk use during the second half of 1991 is expected to recover from the weakened levels recorded in the first half of the year. For all of 1991, commercial use is forecast to reach a record 140 billion pounds, less than 1 percent above 1990.

Beef Breeding Herd Expansion Continues

The U.S. cattle inventory on July 1 was 2 percent above a year ago, and the preliminary 1991 calf crop was estimated up 1 percent. All the expansion was in the beef herd, while the dairy cow inventory declined.

Beef cows and beef replacement heifers increased 2 and 4 percent from a year ago. Further expansion of the beef breeding herd is likely over the next several years due to lower, but continued favorable, returns for cow-calf operators. However, the highest returns for this cattle cycle likely have been attained. The calf crop also should increase for the next several years. The midyear feeder cattle supply of steers and heifers over 500 pounds outside feedlots was up 1 percent.

The number of cattle on feed in the 13 quarterly reporting states on July 1 was up 8 percent from a year ago, the largest for that date since 1978. A larger cattle-on-feed inventory points toward expanding fed cattle marketings in the third and fourth quarters. Third-quarter marketing intentions are 6.04 million head, up 5 percent from a year earlier. However, fed slaughter in July was below expectations and less than a year earlier when adjusted for an extra day of slaughter in July 1991.

Placements on feed during the second quarter were down 4 percent and marketings off 2 percent from a year ago. Steers and heifers showed the greatest increase for the 1,100-pound-and-heavier weight group, up 38 and 93 percent from a year ago. But lighter weight groups placed on feed declined during the spring quarter due to favorable pasture and range conditions coupled with high stocker cattle prices.

Higher Beef Production Eases Retail Prices

Commercial beef production in second-half 1991 is expected to expand 3 to 4 percent from the low level of last year. Commercial cattle slaughter numbers are forecast to show a slightly smaller expansion as dressed weights continue at record levels.

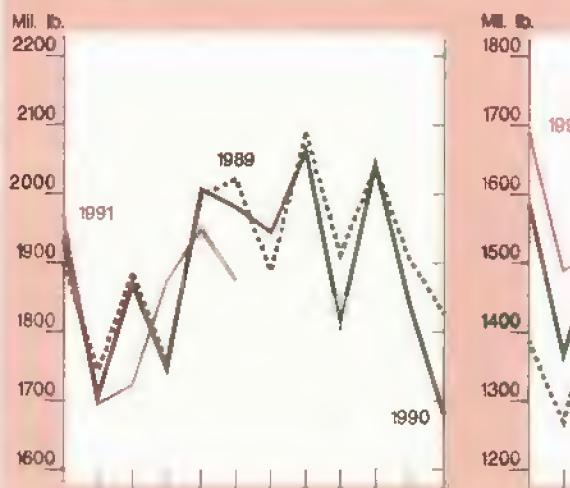
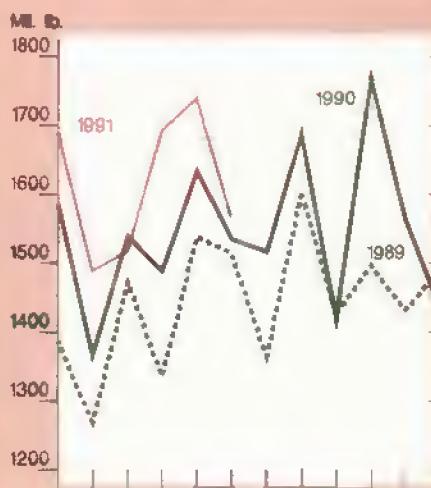
Commercial cattle slaughter and beef production during the first quarter of this year likely marked the lowest level for the expansion phase of this cattle cycle. The current cycle began in 1989 and will probably peak in the mid-90's when the inventory of all cattle and calves is highest for the cycle.

Choice steer prices averaged \$72.16 per cwt in July, about 5 percent below a year earlier and 11 percent below the average in March—the highest month this year to date. With expanding beef, pork, and poultry production forecast for the remainder of this year, the March and April cattle and beef prices are likely the highs for 1991.

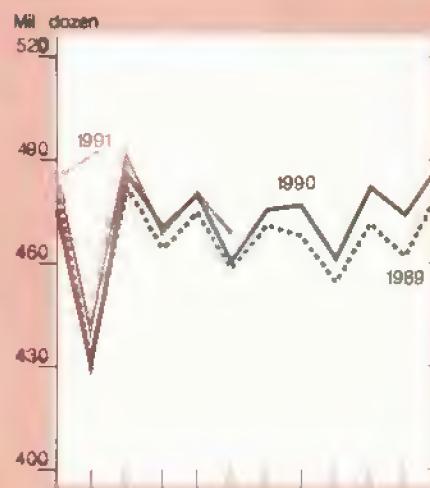
Livestock & Product Output

Agricultural Economy

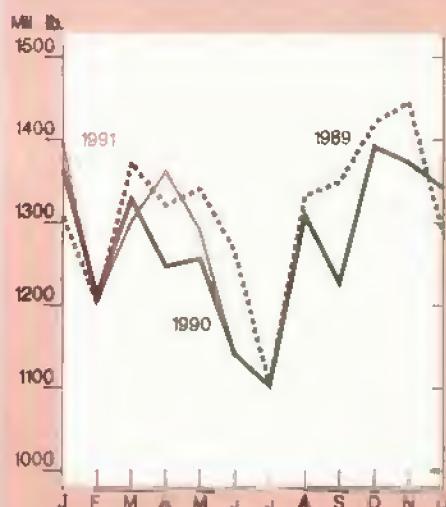
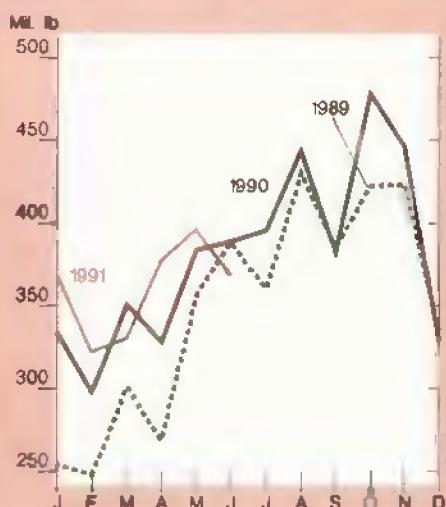
Commercial beef

Broilers¹

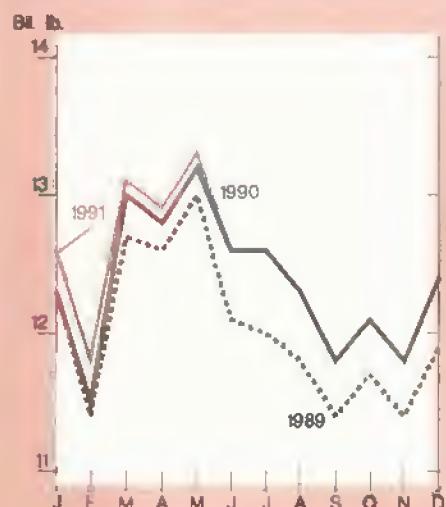
Eggs



Commercial pork

Turkeys¹

Milk



¹Federally inspected production, ready-to-cook

Retail Choice beef prices eased during July to \$2.88 per pound compared with \$2.96 in May but were up from \$2.80 in July 1990. July's farm-to-retail price spread remained about the same as a month earlier, at \$1.32 per pound, and up over 5 cents from May. The wholesale-retail spread widened and the farm-wholesale spread declined as wholesale boxed and fed steer prices dropped faster than retail prices. Further retail price declines are anticipated in coming months as lower cattle prices are passed on to consumers.

Broiler Prices Lower, Output Growth Slows

Fourth-quarter 1991 net returns for broiler producers are expected to be slightly below breakeven, down from 3 cents a pound a year earlier. Higher feed cost and weaker broiler prices will continue to yield net returns below a year earlier during second-half 1991 and most of 1992, contributing to a slower expansion in 1992. Third-quarter net returns are estimated to average 4-5 cents a pound, compared with nearly 10 cents a year ago.

Fourth-quarter broiler production growth probably will slow to 4-5 percent above a year earlier, down from an 8-percent expansion a year ago, reflecting below-year-earlier net returns during the first half of 1991. Third-quarter production is estimated to increase 6-7 percent from a year ago.

Large supplies are expected to hold wholesale broiler prices below a year earlier in the second half of 1991. Broiler prices during the third and fourth quarters are forecast to average 50-54 cents and 44-50 cents per pound. For all of 1991, broiler prices will likely average 4-5 cents below the 55-cent average of a year ago.

Agricultural Economy

Retail prices for whole fryers are expected to continue in the high 80's per pound during second-half 1991, with quarterly averages remaining below a year earlier. Retail prices in the second quarter averaged slightly over 88 cents, almost 3 cents below a year ago.

Turkey Production Slows, Stocks at Record

Turkey stocks continue at a record high. On July 1 stocks totaled 499 million pounds, almost 4 percent above a year earlier. Whole bird stocks were up nearly 13 percent from a year earlier, but other turkey stocks dropped over 14 percent due to increased processing use.

Third-and fourth-quarter turkey production is expected to be unchanged from a year earlier. Production during 1991 will likely be up slightly less than 2 percent from a year ago, the smallest annual increase since 1984. This year's slower growth reflects grower losses experienced from December 1990 through April 1991.

Per capita turkey consumption is estimated to have grown about 5 percent in the first half of 1991. Continued growth in consumption and the slowdown in production is expected to keep stocks from becoming burdensome.

Fourth-quarter Eastern region wholesale hen prices are expected to strengthen seasonally to about 68 cents a pound. Along with expectations of an output slowdown, third-quarter Eastern region hen prices will likely rise seasonally, unchanged from the year-earlier average of 66 cents a pound.

Grower net returns improved during the second quarter to just above breakeven, aided by slightly lower feed prices than a year ago. Net returns during the third quarter are expected to remain slightly above breakeven and slightly above a year earlier. However, fourth-quarter net returns are expected to be below a year ago.

Egg Prices & Output Growth Lower

Fourth-quarter table-egg production will likely range from last year's level to 1 percent higher. Third-quarter table-egg production is expected to reach about 1.2 billion dozen, only slightly larger than a year earlier. Total egg production in the third quarter will probably reach 1.4 billion dozen, only fractionally above last year.

The table-egg flock of around 228 million hens was almost 2 percent larger on July 1 than a year ago and fractionally larger than on June 1. Increased hatching of egg-type chicks during the first half helped move the flock size above the year-earlier level. But on July 1, the egg-type hatching flock was 7 percent smaller than a year earlier, indicating lower production later this year.

The New York wholesale price for Grade A large eggs is estimated to average 77-79 cents per dozen in 1991, down from 82 cents in 1990. Third- and fourth-quarter prices are forecast to continue lower at 75-79 and 77-83 cents.

Retail prices for Grade A large eggs are expected to average in the mid-90 cents per dozen in 1991, several cents below the high levels experienced in 1989 and 1990. Second-quarter prices averaged 93 cents a dozen, nearly 6 cents below last year's average. Second-half prices will likely remain in the low- to mid-90's.

Commercial Milk Use Expected To Rebound

Commercial milk use during the second half of 1991 is expected to recover from the weaker levels recorded in the first half of the year. By the fourth quarter, use is forecast up almost 3 percent from a year earlier. For all of 1991, commercial use is forecast to reach a record 140 billion pounds (milk equivalent, milkfat basis), up less than 1 percent from 1990's record 139 billion pounds.

Commercial use of milk and dairy products (milk equivalent, milkfat basis) declined another 2 percent during the

second quarter of 1991. Demand for most of the major manufactured products also dropped.

Commercial butter disappearance during second-quarter 1991 was down more than 6 percent from a year earlier, while disappearance of nonfat dry milk declined almost 8 percent. Use of American cheese was down 6 percent, while use of other-than-American cheese remained relatively unchanged. Canned milk use was down about 20 percent.

Hard ice cream sales during the second quarter were up almost 8 percent after declining an average of 5 percent over the previous 3 years. Ice milk sales, on the other hand, were down about 5 percent after increasing an average of 2 percent a year in the previous 3 years. Frozen yogurt use, on the other hand, rose more than 35 percent during the second quarter from a year earlier.

Hog Herd Expansion Less Than Certain

Deteriorated crop conditions have caused uncertainty in feed markets. Continued uncertainty about feed costs could erode the high rate of hog herd expansion predicted earlier by the June *Hogs and Pigs* report. Although returns to producers are expected to remain favorable most of this year, any further rise in feed costs would squeeze producers' returns.

Hog prices averaged \$55 per cwt in July, but are expected to decline to the mid-\$40's in September as pork production increases sharply. Prices are expected to remain near the mid-\$40's through most of 1992, based on current feed price projections. However, prices could reach the low \$40's in late 1992 if the strong expansion suggested by the June *Hogs and Pigs* report for the first half of 1992 continues through the year.

Commercial pork production is expected to reach 16.6 billion pounds in 1992, the highest since the previous record of 16.4 billion in 1980. In 1991, production will be about 16 billion pounds.

Retail prices moderated in first-half 1991 from the record highs of last summer and are expected to drift lower in the second half as pork production rises about 7 percent. Retail pork prices in 1992 are forecast to decline 4-6 percent from this year's \$2.10-\$2.15 average per pound.

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AO

Specialty Crops Overview

Prospective harvested area for fresh vegetables suggests summer supplies comparable to or slightly larger than last year. Potato prospects point to a record fall crop, and lower prices than in the last 3 years. Dry edible bean output is expected to be down 4 percent from a year ago, reflecting less harvested area.

Higher grower prices are expected for most fruits in 1991/92 because of smaller output of several fruits. A 41-percent recovery in Louisiana sugarcane acreage will contribute to 5.3 percent more harvested U.S. acreage and near-record production.

Tobacco output is also expected up, but prices are likely to remain firm as cigarette disappearance increases due to growth in exports.

Fresh Vegetable Acreage Higher

Prospective acreage for harvest indicates supplies of fresh vegetables for the summer are comparable to or slightly larger than a year earlier. The total acreage of seven selected fresh market vegetables—broccoli, carrots, cauliflower, celery, sweet corn, lettuce, and tomatoes—is estimated 5 percent higher than a year ago. Acreage increases are expected for all except carrots and celery, which are down 1 and 6 percent.

The fresh tomato area for harvest is forecast 6 percent higher than the 1990 summer crop. Cool weather slowed the start of California's harvest. Heat and drought during May and June stressed the crop in Virginia, while Alabama, Michigan, and New Jersey report tomato crops in good condition.

The prospective area of lettuce for summer rose 12 percent from last year. Cool weather through June slowed maturity in

California, but otherwise the crop is progressing normally.

Lettuce and tomato shipments were running slightly ahead of a year earlier during July, and prices were about the same to marginally lower. Celery shipments were lower and prices much higher than a year earlier.

Dry Bean Production Lower in 1991

Dry edible bean production as of early August is estimated at 31 million cwt, down 4 percent from last year. Estimated acreage for harvest fell 10 percent from 1990. But yields are expected higher than last year because of improved soil moisture in North Dakota and Minnesota.

Although North Dakota expects to harvest 9 percent fewer acres than in 1990, its production is forecast 25 percent higher. North Dakota grows mostly pinto and Navy beans, and prices for these varieties this spring were lower than a year earlier because of a large crop in 1990.

Michigan's production is forecast 6 percent lower in 1991, despite 3 percent additional acreage. Michigan is the largest producer of Navy beans.

Nebraska also expects to harvest fewer acres (down 17 percent) than in 1990. Nebraska is the major supplier of Great Northern beans. Grower prices for Great Northerns also were lower this spring than a year earlier, because of a large crop in 1990.

California's dry bean acreage is forecast 18 percent lower than in 1990. California supplies major shares of lima, kidney, and blackeyed beans. Scarce water supplies caused growers to cancel plans for late plantings.

Despite the 4-percent drop in expected production, grower prices in 1991/92 may not rebound very much from the depressed 1990 levels. The reason is that most beans will remain in abundant supply. Prices for other beans such as blackeye, black turtle, and pink, are expected

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Agricultural Economy

to continue strong if anticipated production cuts materialize.

Near-Record Potato Output Expected

First estimates indicate fall 1991 harvested potato acreage up 2 percent from 1990. If yields for the fall crop return to the trend average for the three seasons prior to 1988 (310 cwt per planted acre), fall production could reach 364 million cwt and the total U.S. output for this year would approach 410 million cwt. This compares with total output of 393 million cwt in 1990 and 370 million in 1989.

Unusually stable and relatively high potato prices during the last 3 years probably contributed to the increased acreage. The average grower price for 1988-90 was \$6.51 per cwt, 47 percent higher than the \$4.44 average for 1985-87. Prices have not fallen below \$5 per cwt since October 1988.

Weather-related production shortfalls, particularly in the Red River Valley of North Dakota and Minnesota, have contributed to the price strength in recent years. However, the region has had fre-

quent rains this summer and the potato crop is reportedly developing normally.

Idaho, the largest potato producer, is expecting output similar to last year's large crop. Washington, the second-biggest producer, has more acreage and improved yield prospects and is expecting a record-large crop.

If the current production potential is realized, potato prices for the 1990/91 marketing season would be expected to fall below those for the past three marketing seasons.

Fruit Prices To Remain Strong for 1991/92

Grower prices for most fruits are expected to average higher in 1991/92 than a year earlier. Part of the reason is lower pear, cherry, apricot, nectarine, and plum production as a result of last December's freeze. In addition, declines in Western states' apple production are expected to contribute to higher prices. But peach prices are expected lower because of a larger peach crop.

Although total apple production is forecast 4 percent higher than in 1990,

declines in the Western states are expected to result in strong prices for fresh apples during the winter and spring of 1991/92. Western production typically provides most of the late-season apples from storage. Strong domestic and export demand for fresh apples also should contribute to price strength.

Although industry sources indicate the 1991/92 California orange crop may be only 75 percent of the pre-1990 freeze level, the partial recovery in the state's crop expected in 1991/92 will likely push the U.S. weighted fresh orange price higher. The reason is that California oranges sell for a relatively high price compared with Florida fresh oranges. Hence, as more California oranges become available, the U.S. average price is weighted more heavily by the higher-priced California oranges.

Sugar Acreage & Production Up

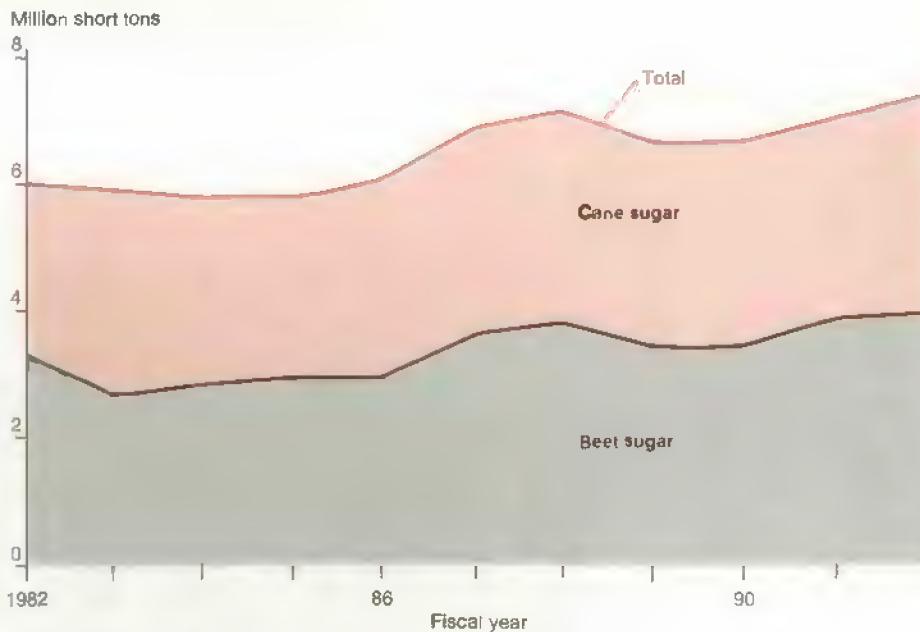
The initial estimate of harvested acreage for the 1991/92 sugar crops is 5.3 percent higher than last season, largely due to a sharp increase in sugarcane acreage in Louisiana. In Florida, cane sugar acreage is up 1.4 percent from 1990 to a record 440,000 acres.

Louisiana appears to be making a dramatic recovery from an abnormally small 1990/91 crop. Louisiana's industry was devastated by unusually cold weather in December 1989 which killed many of the underground roots (ratoons), making it uneconomical to maintain much of the acreage for harvest in 1990. Poor stands of cane on remaining acreage further reduced 1990/91 production.

The harvested acreage of sugarbeets is forecast nearly unchanged from 1990. Increases in major producing states such as Idaho, Michigan, and Nebraska are expected to offset acreage losses in California.

Early prospects point to record or near-record sugar production in 1991/92. USDA forecasts 1991/92 sugar production at 7.3 million short tons, raw value, 300,000 tons higher than a year earlier.

U.S. Sugar Output Is on the Rise

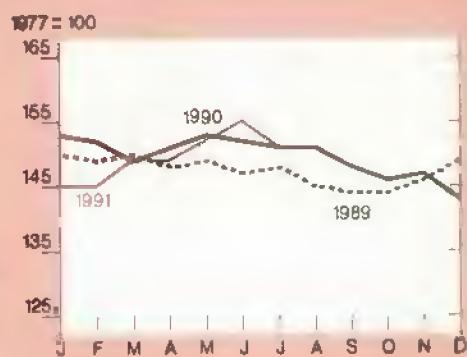


Raw value. 1991 estimated 1992 forecast.

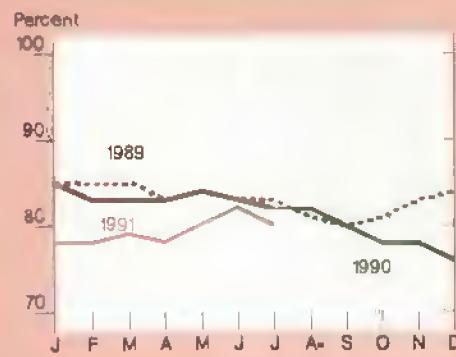
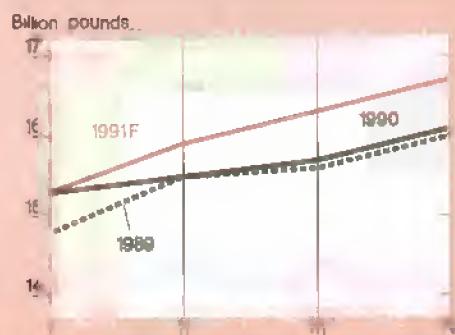
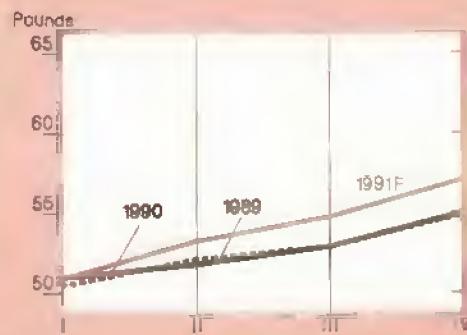
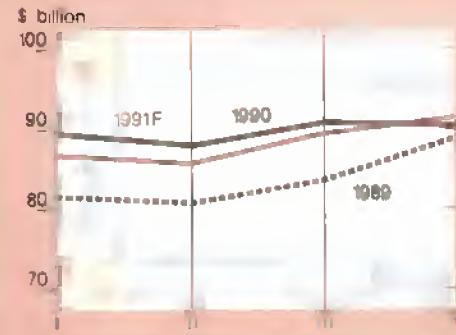
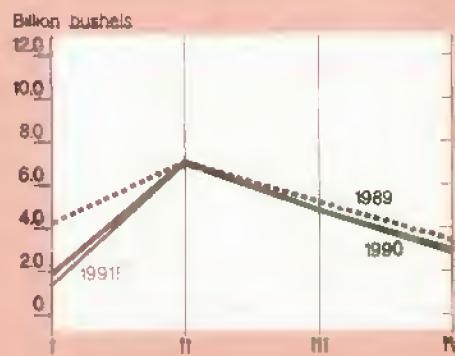
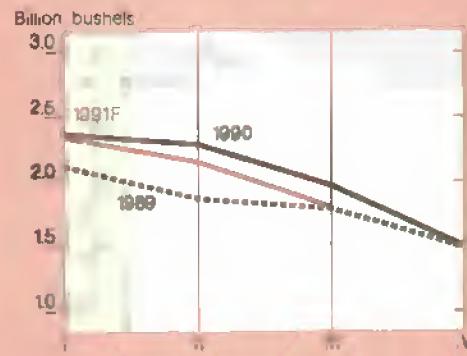
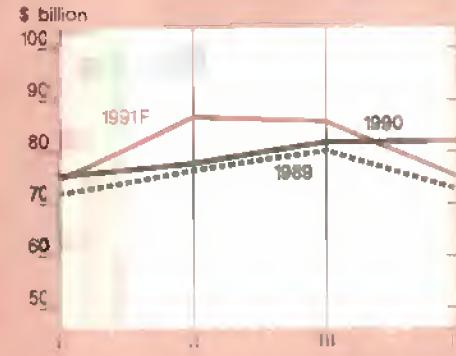
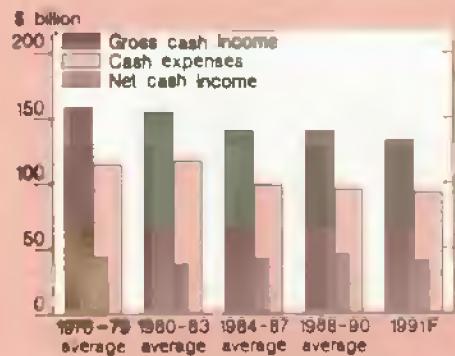
Prime Indicators

Agricultural Economy

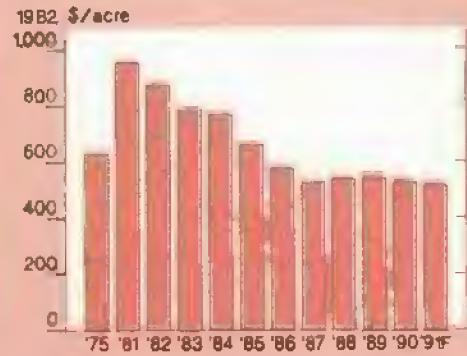
Index of prices paid by farmers

Index of prices received by farmers¹

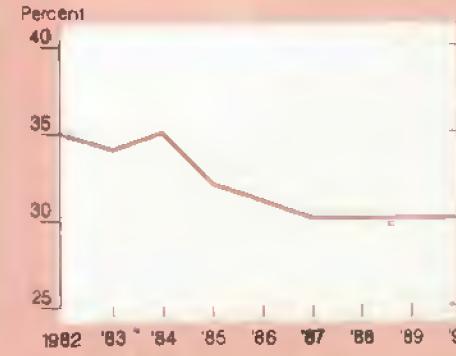
Ratio of prices received/prices paid

Total red meat & poultry production²Red meat & poultry consumption, per capita^{2,3}Cash receipts from livestock & products⁴Corn beginning stocks⁵Corn disappearance⁵Cash receipts from crops⁴Real cash income⁶

Average real value of farm real estate



Farm value/retail food costs

¹For all farm products. ²Calendar Quarters. Future quarters are forecasts for livestock, corn, and cash receipts.³Sept.-Nov.; ⁴Dec.-Feb.; ⁵Mar.-May; ⁶June-Aug. Marketing years ending with year indicated.⁷Cash expenses plus net cash income.⁸Retail weight. ⁹Seasonally adjusted annual rate.

Agricultural Economy

Most of the increase in production is the result of the recovery in Louisiana.

Growing conditions in Florida have been better than usual for cane sugar production. Beet sugar production also is likely to rise from last season because of higher yields in the Red River Valley. Newly installed molasses desugaring facilities also will help boost sugar output.

Tobacco Output Up, Prices Firm

Tobacco production is forecast 1 percent higher in 1991, the result of a 4-percent increase in harvested area and lower yields. However, grower prices are expected to rise because of smaller domestic supplies and higher price supports. The decline in supplies will result from lower carryover stocks due to an expected 3-percent increase in disappearance of U.S. tobacco for cigarette production in 1990/91 as exports grow.

Flue-cured production is forecast at 905 million pounds, down 4 percent from 1990. The lower output is due to a 30-pound-per-acre drop in average yield. Flue-cured tobacco accounted for about 58 percent of all U.S. tobacco production in 1990.

Burley production is forecast at 649 million pounds, up 9 percent from 1990. The change from last year is due to increased acreage. Burley yields are forecast 107 pounds an acre lower than last year. [Glenn Zepp (202) 219-0883]

For further information, contact: Boyd Buxton, fruit; Gary Lucier, vegetables; Peter Buzzanell, sweeteners; Verner Grise, tobacco; Doyle Johnson, tree nuts and greenhouse/nursery; David Harvey, aquaculture; Lewrene Glaser, industrial crops. All are at (202) 219-0883. AO

Commodity Spotlight



Corn's Link to Sugar: HFCS

The U.S. sugar program does more than support the price of U.S. sugarcane and sugarbeets. The sugar program indirectly supports the price of all types of sweeteners. High fructose corn syrup (HFCS), a sugar substitute, has come under the umbrella of protection offered by the sugar program, and with it, corn.

The HFCS industry has expanded rapidly in the last decade and a half. Domestic shipments of HFCS have risen from 525,000 short tons (dry weight basis) in 1975 to over 6.1 million tons in 1990. Use of HFCS has grown to over 36 percent of total caloric sweeteners consumed in the U.S. over the same time period. As HFCS output has grown, the process has used an increasing amount of corn. The demand for corn to produce HFCS increased more than eightfold from 1975 to 1989. And in farm press ads, wet millers have said that wet milling adds 25 cents to the price of a bushel of corn.

Assessing all this evidence, representatives of the corn sweetener industry have argued in favor of the U.S. sugar program. In testimony before the International Trade Commission, the Hawaiian

Sugar Planters' Association said this use of corn reduces deficiency payments for corn by \$500 to \$700 million per year. But how much does the sugar program really affect the price of corn?

Wet Millers Produce More Than HFCS

The percentage of the corn crop allocated to wet milling for all purposes more than doubled from 1975 to 1989. Corn-based sweeteners, however, are not the only saleable product of the wet milling industry. In 1989/90 less than half of this sector's revenue was attributable to sweetener sales. The remaining revenue came from the sale of other products including by-products.

A bushel of corn used in wet milling produces about 33.3 pounds of HFCS (dry weight), 15 pounds of gluten feed, and 1.6 pounds of crude corn oil. When sugar prices rise, so will the demand and price for HFCS, but the by-products must also be put on the market, lowering their prices.

Most wet milling by-products used as feed are dried and shipped overseas. Some feed is used domestically, however, and the potential exists for even greater domestic use of by-products as feed.

Still, most of the growth in the wet milling industry is due to the demand for HFCS. Consumption of HFCS grew more than 97 percent between 1982 and 1990, though the rate of increase slowed beginning in 1987 as the market matured. The rise mostly reflects the increase in corn sweeteners' share of total caloric sweeteners, but is also due to an increase in total sweeteners consumed.

Tracing the Impact of Sugar Prices on Corn

Domestic raw sugar is indistinguishable from the foreign raw sugar on which an import quota is levied. This article examines the link between the price of sugar and the price of corn, using the import quota to effectively vary the price of sugar. This is done even though in fact

Commodity Spotlight

Production of HFCS Has Expanded Rapidly

Marketing year (Sept.-Aug.)	HFCS	Com used for: Glucose/ dextrose	All wet milling *	U.S. corn produc- tion	Share of U.S. corn for wet milling
* million bu					
1975	45	162	328	5,840	5.6
1976	62	164	352	6,289	5.6
1977	80	170	384	6,505	5.9
1978	105	170	414	7,268	5.7
1979	127	170	442	7,928	5.6
1980	165	183	503	6,639	7.6
1981	185	183	581	8,119	7.2
1982	215	188	660	8,235	8.0
1983	256	189	742	4,174	17.8
1984	310	187	810	7,672	10.6
1985	328	188	853	8,875	9.6
1986	339	185	879	8,225	10.7
1987	359	187	913	7,131	12.8
1988	362	196	932	4,929	18.9
1989	370	206	970	7,525	12.9

* Includes corn starch, modified corn starches, and fuel ethanol.

the support price is first established and the quota set to enforce this price.

The impact of the sugar import quota on grain prices begins with raw sugar. This is where the "stone hits the water," and the ripples then move out through the economy.

A simulation model is used to predict the effect of changes in the quota on sugar prices. The model uses 1982 as a base or representative year, with domestic raw sugar prices of about 20 cents per pound, twice the world price. The most significant effect generated by the quota occurred in the long run: unilaterally eliminating import restrictions is estimated to cause a reduction in the price of corn of about 3 cents per bushel.

To examine how various sugar price support levels affect corn prices, the quota is varied. To raise domestic raw sugar prices, the import quota is tightened, reducing the domestic availability of sugar. In the short run, with limited ability by domestic producers to adjust supplies, this reduction is more effective in raising price than it would be in the long run.

The domestic price of raw sugar can be raised from 10 cents to nearly 25 cents above the world price by a 60-percent reduction in imports. The refined sugar price rises 39 percent in response.

HFCS, a close substitute for refined sugar in many uses, experiences a price rise of 34 percent. Increased HFCS production boosts the derived demand for corn, and the corn price is raised about a cent per bushel.

Allowing an increase in imports by the same amount, for the purpose of reducing domestic raw sugar prices, operates through the same linkages. However, this does not lower the price of corn significantly.

To test the extreme ranges of the sugar quota, imports can be eliminated. This causes a near tripling (260 percent) of raw sugar prices and doubling (190 percent) of the price of refined sugar. This in turn pulls up the price of HFCS, and the increased demand for corn adds 1.5 cents to farmers' per-bushel receipts.

When supplies can adjust over the long run (due to increased mobility of land and capital, for example), the price-enhancing effects of a tighter sugar quota are reduced. The longrun corn price increase is negligible. This occurs for two reasons. First, with a more responsive domestic supply of sugar, the tendency for raw sugar prices to rise is diminished. This lessens somewhat the longrun incentive to expand HFCS production.

Second, in the long run, as more land becomes available, corn producers are

more easily able to supply the increased wet milling purchases, either by shifting land from other crops (as in the model), or from the release of retired acreage under the CRP (which is not considered in this model).

The effects of unilaterally relaxing the sugar quota are opposite in direction and different in absolute magnitude from the results of reducing the quota. Many of the shortrun benefits of a loose quota would accrue first to sugar refiners, whose services would be in greater demand.

Consequently, even if the sugar program were abolished and the quota on imports were immediately eliminated, all the benefits of the lower world price might not be passed on to consumers immediately in a lower refined sugar price. Some of the benefit would be absorbed in the refining margin, lessening the beneficial impact to consumers.

In the long run, increased investment in sugar refining results in lower prices for sugar as well as for HFCS and increased consumer benefits. If the sugar program, working through the quota, were unilaterally and completely eliminated, this would translate into lower corn demand and approximately a drop of 3 cents per bushel in the price of corn.

Benefits to Corn Growers Are Minor & Temporary

The benefits of the sugar program to corn producers may be overstated when the network of interactions within the sweetener industry is not accounted for. Four points stand out:

- HFCS would continue to be produced even if the U.S. eliminated sugar import restrictions. The wet milling demand for corn would be reduced, but not eliminated. Wet corn milling production serves more than the sweetener market. Alcohol production, for example, accounted for 22.9 percent of wet milling corn use in 1989, compared with just 1.5 percent in 1975. Corn oil is also produced as a by-product. These

Commodity Spotlight

goods are not affected directly by the sugar program, and thus the demand for corn derived from their use is little affected.

- HFCS cost of production is, by most estimates, below the average world cost of sugar production, and so would likely remain competitive in the U.S. even in the absence of a sugar program.

Behind The Model

A simulation model assesses the impact of the sugar program on corn prices. The model captures critical economic relationships within the sweetener complex as well as the links between these industries and the remainder of the economy.

The wet milling industry, though more complex in reality, is modeled as a two-output industry. In the model, sweeteners including HFCS are the primary output. All other products, including gluten feed, corn oil, ethanol, and starch are modeled as secondary outputs.

With a baseline simulation established for 1982 (and updated to 1988), domestic sugar prices are varied from their baseline levels. This is done by changing the quota, first tightening, then loosening, until it no longer has any effect.

Two sets of results are considered. First, shortrun simulations refer to the likely implications of changing the sugar price (via the quota) when capacity in the HFCS and sugar refining industries (and other sectors as well) cannot be altered. It is also assumed that sugarbeet and sugar-cane acreage are fixed in the short run, while corn acreage response is marginally responsive.

Second, in longrun simulations, productive capacity is allowed to be altered. In longrun equilibrium, after-tax returns to capital are equated across all uses.

- The wet milling by-product market usually dampens the effect of rising and falling sweetener prices on feed grains. When sweetener prices rise under the sugar program and more HFCS is produced, more by-products—corn oil and gluten feeds—are also produced. Since the by-product prices fall (assuming nothing else has changed), total returns to the HFCS industry rise less rapidly than would otherwise be the case. This limits the incentive to expand HFCS production.
- Because most imported sugar is in raw form, the import quota first affects the price of raw sugar, which in turn affects refined sugar, the primary HFCS competitor. The refined sugar price may change at a different rate because it involves more inputs than raw sugar and can provide some cushion to the refined price, at least in the short run. The price effect of the quota is weakened by refining, so that the impact on HFCS and ultimately, corn, is also diminished.

Furthermore, the increased supply of feed substitutes such as corn gluten meal competes with corn grain in livestock rations. In other words, the production of HFCS does not fully exhaust the feed value of the input—corn. Consequently the derived demand for corn increases less than might be expected when HFCS production increases.

The sugar price support program, operating through the import quota, does raise corn prices. However, the extent of the price rise is small. The price-depressing effect of about 3 cents per bushel of corn from eliminating the U.S. sugar program and allowing unrestricted imports, would occur in the long run. On the other hand, eliminating sugar imports has the potential to raise corn prices by about 1.5 cents per bushel in the short run.

(Matt Rendleman (202) 219-0405) AO

World Agriculture and Trade



USSR Adjusts Trade To Deal With Debt

The value of total USSR imports was cut by nearly 50 percent during the first half of 1991, compared with the first half of 1990. Imports were slashed from former bloc trading partners as those countries sought new terms of trade and less centralized trading arrangements. The USSR also cut imports from OECD countries by 47 percent as it sought to balance trade and earn money to service its debt.

With exports to OECD countries in the first half of 1991 roughly 85 percent of the same period a year earlier, the USSR posted a positive trade balance with the OECD countries. And, a positive overall balance of trade was reported for this 6-month period.

The contents of this month's issue of *Agricultural Outlook* were prepared prior to the recent events that took place in the Soviet Union.

World Agriculture and Trade

The USSR cut food imports in January-June 1991. In volume, grain imports were 27 percent lower, animal oil imports down 56 percent, sunflowerseed oil imports down 79 percent, and poultry meat down 49 percent. Of the 10 agricultural commodity groups identified in the midyear report, only red meat and potato imports were up.

The fragmentary information on commodities suggests that nonagricultural imports may have been down more. This would reverse the recent trend of higher priority given to nonagricultural imports. In 1990, agriculture's 16-percent share of total imports was about half its peak share in 1981. Greater nonagricultural imports largely explained why the USSR went from an \$11.5-billion trade surplus beginning in 1988 to more than a \$5-billion trade deficit entering 1990.

U.S. Ag Exports to USSR Down from 1989 Record

After reaching a record \$3.6 billion in calendar 1989, the value of U.S. agricultural exports to the USSR declined 37 percent in 1990. A \$1.4-billion drop in grain exports more than accounted for the \$1.3-billion total decline. The

volume of corn exports fell almost 50 percent, and wheat fell 31 percent.

While the total volume of soybean and soybean meal exports increased, a 20-percent price decline helped reduce the value of total agricultural exports. Grain and soy products accounted for 90 percent of U.S. agricultural exports to the USSR in 1990, despite large sales of butter and poultry.

The Soviets had two successive years (1989 and 1990) of good grain harvests, with 1990 a near record. The USSR could delay shipment of grain contracted in the latter half of 1990 because of the large harvest and the buildup of 42 million tons of grain stocks since 1982 according to USDA estimates.

January-June 1991 U.S. agricultural exports to the USSR were a little more than half in the same period of 1990. Earlier this year, the U.S. allocated \$1.6 billion in GSM-102 export credits for the USSR and had announced intentions for another \$0.5 billion in October. Together with lower grain prices in first-half 1991, the credit guarantees helped sustain the volume of 1991 U.S. grain exports to the USSR.

All U.S. wheat exports to the USSR since 1987 have been under the Export Enhancement Program (EEP). Prices for U.S. wheat sales to the USSR under EEP in the first half of 1991 averaged about \$80 per ton, compared with nearly twice this level for the first half of 1990. EEP bonus rates for exporters thus far in 1991 have averaged \$44 per ton, compared with less than \$20 per ton during December 1989-May 1990.

The bonus rate for the July/August 1991 sales was over \$50 per ton. Total bonuses for U.S. wheat sales to the USSR since May 1987 exceed \$736 million, of which \$116 million was for sales thus far in 1991.

The current U.S.-USSR grain agreement requires the USSR to buy an average of 4 million tons each of wheat and coarse grains per calendar year from the U.S. However, the USSR may purchase as little as 3.25 million tons in one year, and make up the other 0.75 million tons in a later year.

During January-June 1991, U.S. corn exports to the USSR were 6 million tons. U.S. exporters signed contracts for and exported 2.1 million tons of wheat to the USSR during the same period. The USDA Export Sales Office counted only 933,000 tons of this toward calendar 1991.

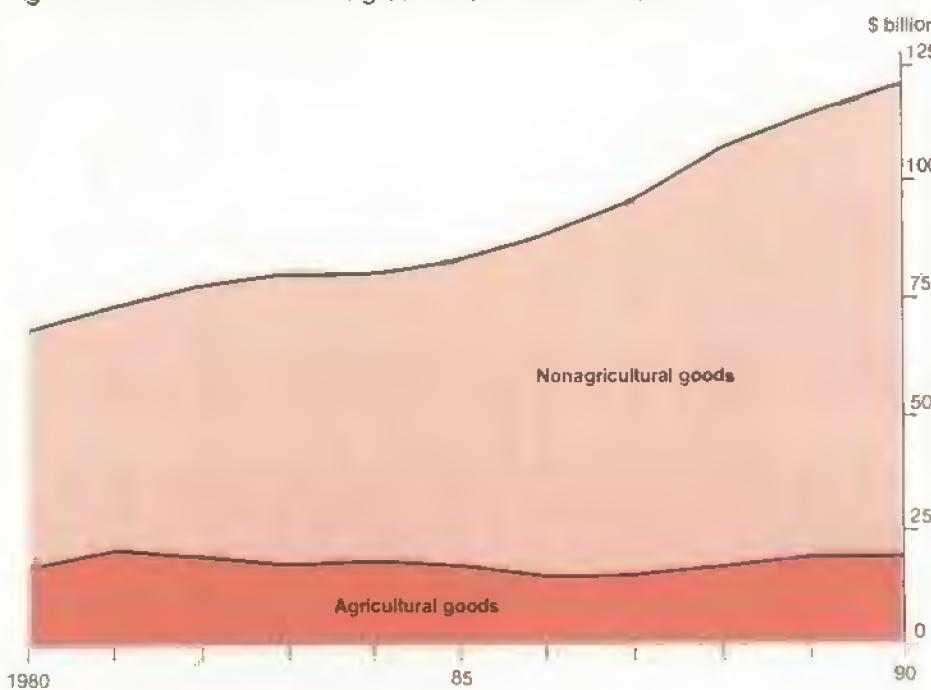
The remainder of the wheat was credited against the October 1989-September 1990 agreement year and the last quarter of 1990. In July-August, the USSR contracted for another 561,000 tons of wheat, bringing purchases, according to the Export Sales Office, to 1.5 million tons for calendar 1991.

Nonag Import Debt Mounts

Favorable terms of trade for agricultural products in the second half of 1990 failed to entice the USSR. In October, the USSR had to sell fewer barrels of oil for a ton of grain than at any time since 1982, and probably the least ever.

The Soviets instead continued high imports of nonagricultural goods while

Agricultural Goods Are Declining as a Share of Soviet Imports



World Agriculture and Trade

U.S. EEP Wheat Purchases by the USSR Have Dropped Since 1986/87¹

Year	Wheat purchased	Bonus rate 2/	Total bonus
	1,000 tons	\$/ton	\$ million
1986/87	4,000	41.52	166.0
1987/88	8,805	32.00	281.8
1988/89	4,696	20.59	96.7
1989/90	3,799	19.95	75.8
1990/91	2,669	43.57	116.3
Total	23,969	30.73	736.7

¹ Sales as of Aug. 13, 1991. ² Weighted average.

campaigning for concessionary terms in the competitive agricultural market. A clause in the October reform program expresses the Soviet government's interest in loans at preferential rates from capitalist countries. Credit in one area frees resources for purchases in another.

In 1990, the USSR increased imports of machinery and transport equipment more than \$10 billion over 1989 from all sources, including \$4.5 billion in calculating and office equipment. About half the increase in machinery and equipment was from the West, but none of the increase came from the U.S.

The USSR increased imports of a variety of nonmedicine, nonfood consumer goods in 1990. Cosmetic imports increased \$400 million, silk and similar synthetic fabrics \$270 million, and leather footwear \$400 million. The USSR also imported 98 billion cigarettes, a 75-percent increase over 1989.

Soviets Emphasize Hard-Currency Trade

Soviet exports declined in 1990, but only because the USSR deliberately continued its cutback of exports to the socialist countries—action taken as early as 1988. With the change in political situation in the second half of 1989, the decline accelerated through 1990. Because these countries had paid the USSR with their soft (nonconvertible) currencies, the USSR viewed the positive trade balance with Eastern Europe and other allies during 1980-87 as a liability.

While soft-currency exports declined, hard (convertible) currency exports increased in 1990 to a record \$35.5 billion. The USSR stepped up oil exports to the West and further benefited from the high oil prices in the second half of 1990. By the end of the year, the USSR had cut its trade deficit with the OECD countries by \$1.7 billion—over 25 percent—in spite of increasing imports from the West.

The Soviets put higher priority for hard-currency imports on nonfood goods. Hard-currency imports rose by \$2 billion in 1990 to a record \$37 billion, with little or no net increase in hard-currency agricultural imports from the West. Hard-currency grain imports in 1990 were only about 11 percent of total hard-

currency imports, down from their average of 21 percent in 1981-85.

Agriculture's share of hard-currency imports in 1990 was perhaps 20 to 25 percent, well below the 35-percent average in 1981-85.

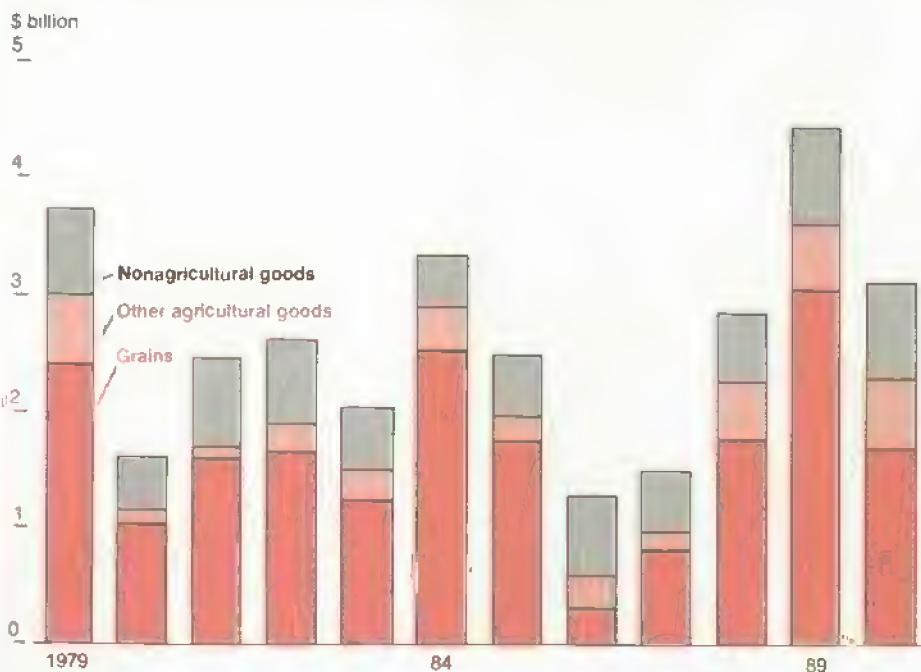
The aggressive import programs in 1988 and 1989 included an additional \$16 billion for nonagricultural goods, and only a \$3.5-billion expansion for farm products. By the end of 1990, the USSR had allowed net hard-currency debt to reach \$45 billion.

Prospects for USSR Debt Repayment

The USSR debt must be put in perspective. In area, the USSR is the world's largest country, more than twice the size of either the U.S. or China, with vast natural resources. Its population of 290 million is about 15 percent larger than the U.S. population.

The USSR is the world's largest producer of natural gas (output about equal to the combined total of the OECD countries), and production is increasing. Despite a 9-percent decline in January-June 1991 output of petroleum, the

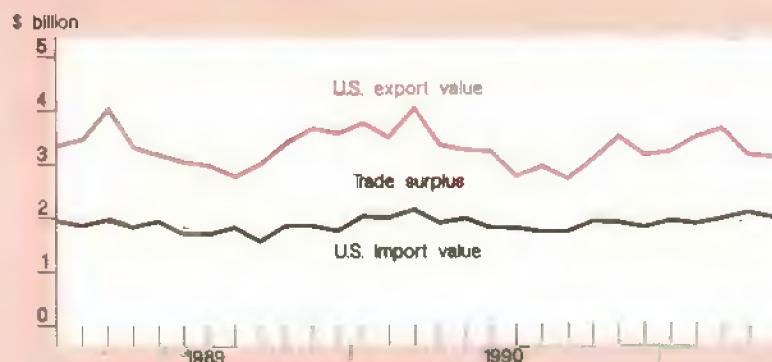
Grains Typically Make Up Over Half of U.S. Exports to the Soviet Union



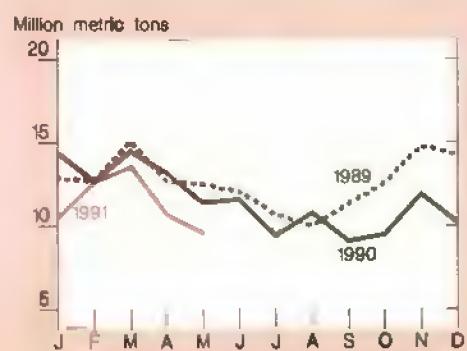
U.S. Trade Indicators

World Agriculture and Trade

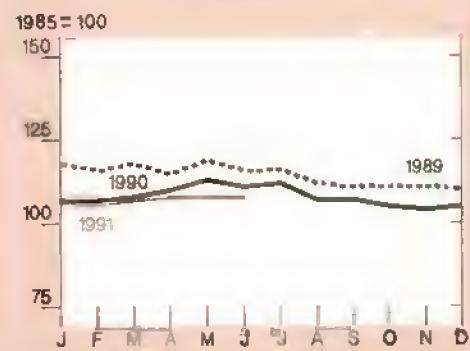
U.S. agricultural trade balance



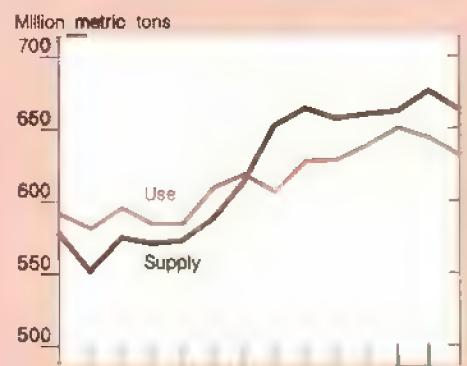
Export volume



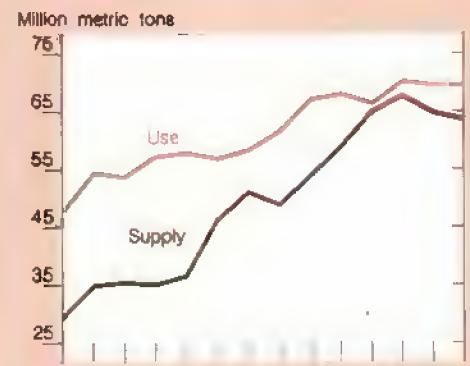
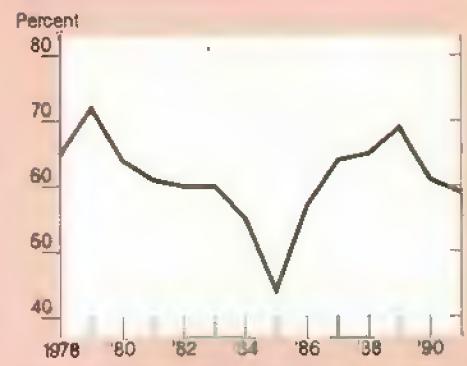
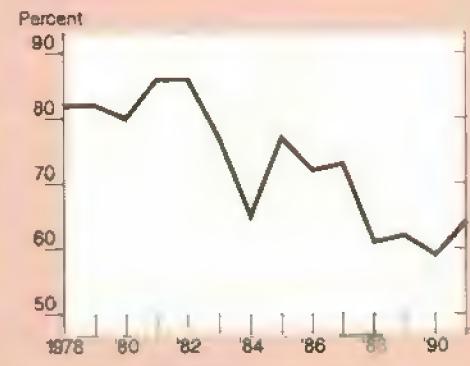
Index of export prices



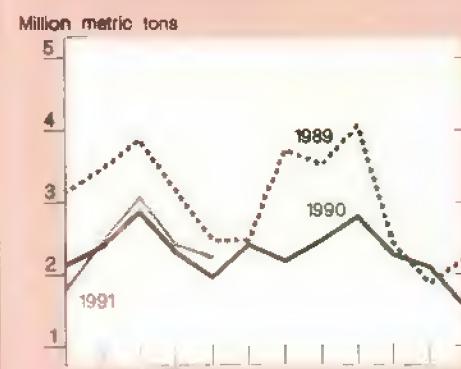
Foreign supply & use of coarse grains



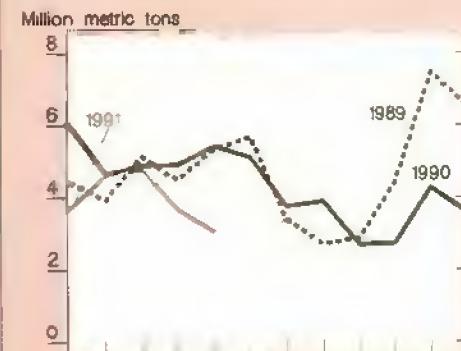
Foreign supply & use of soybeans

U.S. share of world coarse grains exports^{1,2}U.S. share of world soybean exports^{1,2}

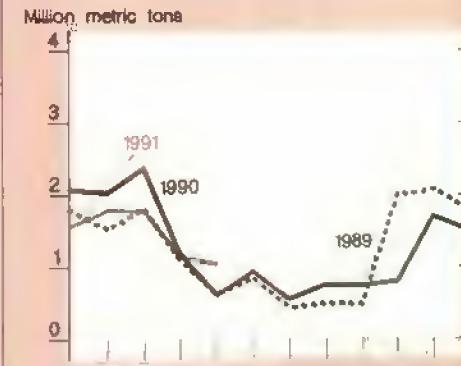
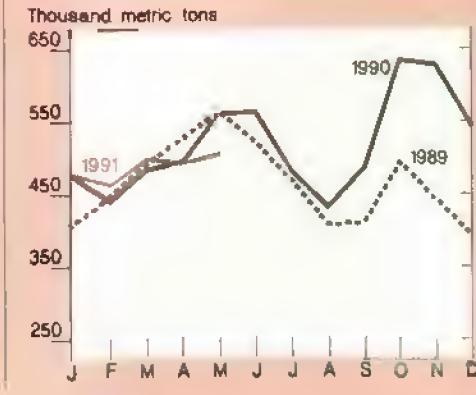
U.S. wheat exports



U.S. corn exports



U.S. soybean exports

U.S. fruit & vegetable exports³

World Agriculture and Trade

USSR remains by far the world's largest petroleum producer and second-largest gold producer.

At the end of 1990, Poland's net debt, estimated at \$40 billion, was comparable to that of the USSR. Yet Poland's area is only 1 percent of the USSR, and its population just 13 percent. While the USSR's net debt at \$45 billion was equivalent to 3 percent of its Gross Domestic Product (GDP), Poland's equaled 32 percent of GDP. Poland's debt service ratio was 3 times higher and its net debt-to-export ratio almost 4 times higher than the USSR's.

Still, the vast natural resources and educated population of the USSR have not been used efficiently under the centrally planned system. Effective resource use

September Releases from USDA's Agricultural Statistics Board

The following reports are issued at 3 p.m. Eastern time on the dates shown.

September

- 4 Walnut Production (Tent.)
- 5 Egg Products
- Poultry Slaughter
- 6 Celery (1 p.m. report)
- Dairy Products
- 10 Vegetables
- 12 Crop Production
- 13 Milk Production
- Turkey Hatchery
- 18 Cattle on Feed
- 19 Cattish
- 23 Hog Stocks
- Cold Storage
- Livestock Slaughter
- 24 Eggs, Chickens, & Turkeys
- 25 Citrus Fruits
- 26 Potatoes
- 27 Hogs & Pigs
- Peanut Stocks & Processing
- 30 Agricultural Prices
- Grain Stocks

will be imperative for the USSR in order to service and retire debt run up by high nonagricultural imports from the West.

Currency Control at Issue In Debt Reduction

The ability of the Soviet economy to function efficiently and to finance debt repayment is not the only factor affecting payment performance. Payment performance also depends on what entities in the country are responsible for payment, and their access to hard currency. This issue of control spans not only central versus republic authority, but also the degree of control by local authorities, firms, and individuals.

The national government has controlled the movement and allocation of most foreign exchange earnings. In November 1990, faced with a large hard-currency debt, the government took an aggressive stance on debt reduction by requiring exporters to sell 40 percent of their foreign currency earnings to the USSR Bank for Foreign Economic Activity to be used for debt retirement. Firms have had to sell additional foreign currency earnings to another fund that finances imports, including food imports.

Control of foreign currency remains a contentious issue while the USSR is in the process of change. Russia, for example, produces about 90 percent of Soviet oil, 75 percent of its natural gas, and likely as high a share of gold. Russia also accounts for nearly 80 percent of Soviet exports. The republic's government and firms stand to benefit greatly if foreign currency earnings are removed from national control.

The chance of repayment of long-term loans depends on the ability of future reforms to provide a framework for a coherent economic system for the nation and the individual republics. The USSR has large reserves to sustain its economy as it reforms, but the process will be extremely complicated for this large, diverse society. [Kathryn Zeimetz (202) 219-0621] AO

Resources



Farmland Values Rising More Slowly

A national panel of 450 rural real estate appraisers surveyed in July expects U.S. farmland values to rise 0.9 percent during the next 12 months. The appraisers also reported a 2.9-percent increase in farmland values during the previous 12 months. Appraisers cite weakness in the economy and lower commodity prices as key reasons for the slower expected rise in farmland values.

In July 1990, 64 percent of the appraisers forecasted higher values for the next 12 months, while only 3 percent expected declines. They looked for higher commodity prices, increased demand by producers expanding operations, and higher inflation to help support a gain of 3.2 percent in farmland values during July 1990-91. But in July 1991, only 39 percent of the appraisers expected higher farmland values in the year ahead, and 15 percent anticipated declines.

Farmland Values Show Biggest Third-Quarter Gain In North Central Region

1991	West	North Central	South	North- east	U.S.
% change					
Jan.-March	0.1	-0.8	0.3	0.3	-0.1
April-June	0.3	0.5	-0.1	0.0	0.2
July-Sept.*	0.3	0.4	0.1	0.0	0.3

*Expected change. Based on July 1991 national survey of rural appraisers.

Rural Appraisers Reduce Expected Increase in U.S. Farmland Values

Period forecast	West	North Central	South	North- east	U.S.
% change					
July 1990-91	3.0	4.7	1.5	1.7	3.2
October 1990-91	2.3	3.2	0.1	3.1	2.0
January 1991-92	1.7	0.2	-0.7	0.4	0.4
April 1991-92	2.0	2.1	1.6	1.1	1.9
July 1991-92	1.9	1.7	-1.1	0.5	0.9

Biggest Gain Expected in West, N. Central Regions

Just over half the appraisers from the West expect higher farmland values in that region in the year ahead, while 40 percent anticipate no change. Overall, farmland values there are expected to rise 1.9 percent between July 1991 and July 1992. Appraisers cited stronger investor demand, higher commodity prices, and an improved economy as principal factors supporting the expected increase.

About three-fourths of the appraisers in the West reported rising farmland values during the past year. They attributed this 3.2-percent gain in values largely to increased investor demand for farmland, producers expanding their operations, and higher commodity prices.

In the North Central region, a third of the appraisers expect higher values over the next 12 months, down from 73 percent a year ago, while 57 percent currently anticipate no change. The 1.7-percent increase expected for the year ahead is less than half the 4.2-percent rise reported for the preceding year.

Those expecting higher values in the upcoming year look for increased demand for farmland, favorable weather, and higher commodity prices. Reported value gains during the past year largely stem from higher commodity prices and stronger demand for farmland from producers expanding operations.

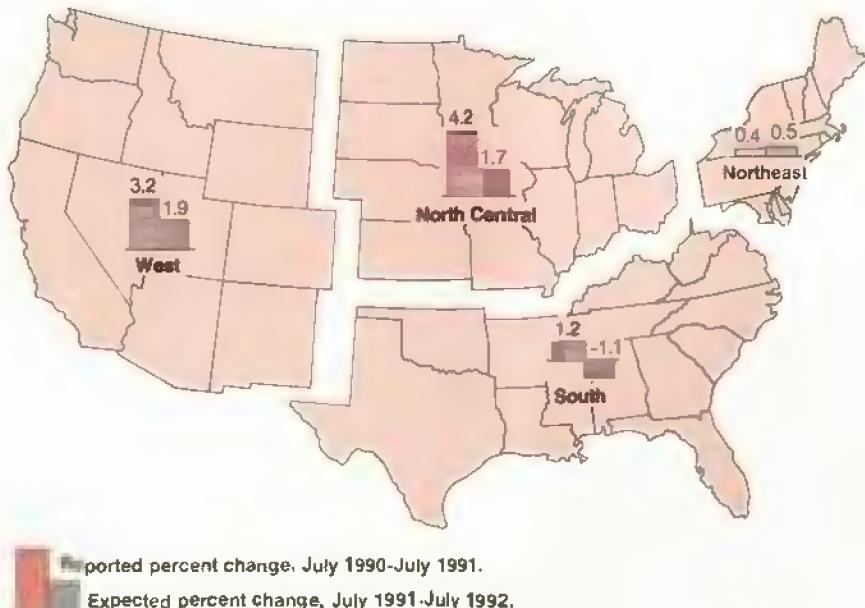
Values Up in Northeast, Down in the South

Appraisers in the Northeast anticipate a 0.5-percent increase in values over the next 12 months, about half the 1.1-percent gain expected in April 1991 for the 12 months following that survey. The July year-ahead increase is contingent on higher commodity prices, while the April prediction hinged on expectations of both higher commodity prices and stronger investor demand.

Eighty-six percent of appraisers in the Northeast indicated unchanged values during the year past, although 11 percent reported higher values. Overall, appraisers in the Northeast reported a gain of 0.4 percent since July 1990. Those reporting higher values cited improved farm incomes and stronger demand for farmland.

Appraisers in the South anticipate a 1.1-percent drop in farmland values in the year ahead. They were about equally divided on whether values would be higher, lower, or unchanged. A weaker economy and lower commodity prices contributed to the appraisers' forecast drop in farmland values.

The Rise in Farmland Values Is Expected to Taper Off or Reverse in Most Regions in 1991-92



Based on a national survey of rural appraisers conducted during July 1991, for the continental U.S.

Resources

About the Survey

A panel of about 450 rural appraisers, all members of the American Society of Farm Managers and Rural Appraisers, participates in quarterly surveys of farmland values. Their opinions on farmland values complement the Economic Research Service's annual surveys of farmland values.

Appraisers focus on value changes during the past 3- and 12-month periods and on expected changes over the next 3- and 12-month intervals. In determining regional averages, appraisers weighted individual responses according to the acres of land in farms within each reported area. Similarly, the regional averages are weighted by acres of land in farms to develop national weighted averages.

The Wisconsin Survey Research Laboratory at the University of Wisconsin conducts the surveys for the Economic Research Service.

Nearly half the surveyed appraisers in the South reported higher values during the past year, while 40 percent indicated no change. They attributed the 1.2-percent gain to higher commodity prices, a stronger economy, and increased investor demand for farmland.

Quarterly Forecast Shows Some Strength

After reporting a slight decline in first-quarter 1991 farmland values, appraisers indicated a 0.2-percent increase in second-quarter values and an expected 0.3-percent gain in the third.

Quarterly changes vary regionally. While the West exhibits consistent 1991 gains, the North Central region shows the strongest second- and third-quarter increases, at 0.4 to 0.5 percent. Changes in the South are mixed, and appraisers in the Northeast indicate no change since first-quarter 1991. [Roger Hexem (202) 219-0423] AO

U.S. Food & Ag Draw Japanese Investors

During the past decade, several factors have made U.S. food and agricultural enterprises attractive to Japanese investors. Depreciating land values in the U.S. in the early to mid-1980's, an appreciating exchange rate favoring the yen, elimination of Japanese trade barriers for some key products, and the opportunity to satisfy both Japanese and American consumer demands have all lured Japanese investment. An economic boom in Japan in the late 1980's provided capital to take advantage of investment opportunities overseas as well as at home.

Foreign Ownership in U.S. Small but Growing

The total amount of foreign-owned agricultural land in the U.S. was relatively stable through the 1980's, but increased 12 percent in 1990. The U.S. has nearly 2.3 billion acres within its boundaries, and of this, almost 1.3 billion is privately owned agricultural and forest land.

Of the total privately owned land, only 14 million acres—a little more than 1 percent—is owned by individuals or firms outside the U.S. Japan ranks eighth with 535,880 acres, and the type and location of land owned by Japanese investors is diverse. Major Japanese landholdings include 180,000 acres of forest land in Maine, 110,000 acres of pasture and cropland in New Mexico, and 80,000 acres in Hawaii.

Only in Hawaii is Japan's agricultural land ownership significant. The 80,000 acres represent 45 percent of the state's foreign-owned agricultural land and 5 percent of the state's privately held agricultural land. Altogether, Japanese

investors hold only 3.7 percent of foreign-owned farmland in the U.S.

But the value of the land they own is much higher than other foreign investors' property. The reported value of all foreign-owned agricultural land in 1990 is roughly \$10 billion, with land owned by Japanese investors valued at just over \$1 billion, or 10 percent of the total.

Throughout the 1980's, because of the large appreciation of the Japanese yen, the price of agricultural land in terms of the yen declined—from 210,000 yen per acre in 1982 to 100,000 yen per acre in 1990. Most of the land purchased by Japanese investors was acquired in the late 1980's.

Investments To Expand Markets

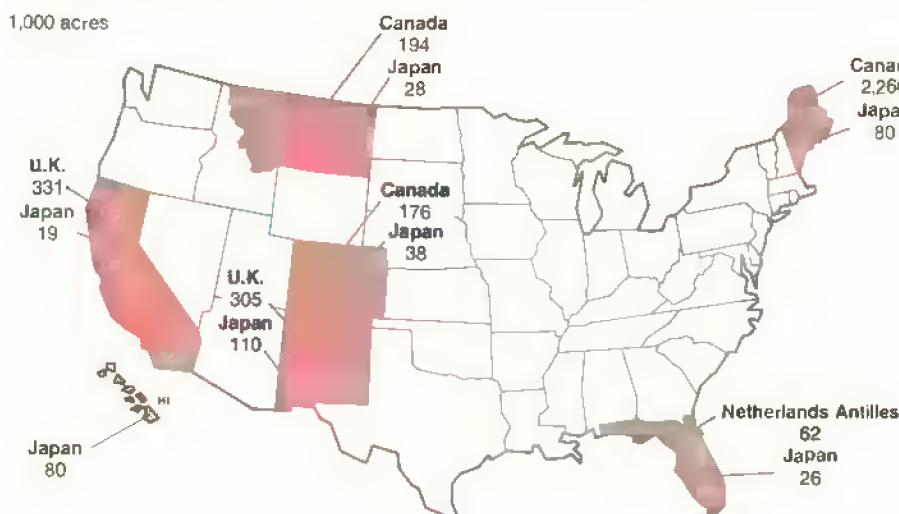
In 1990, the total foreign investment in U.S. food processing was \$22.9 billion. Western Europe has the largest foreign investment in U.S. food processing, with investments of \$21.2 billion—93 percent of the total. The UK is the largest foreign investor in U.S. food processing—with nearly \$9 billion (38 percent) in 1990.

Relative to other types of Japanese investment in U.S. firms, the Japanese stake in food and agricultural establishments is growing, but is still very small. The Japanese share of all foreign investment in U.S. industry increased from 7.1 percent (\$7.7 billion) in 1981 to 20.6 percent (\$83 billion) in 1990.

Over the same period, the share of Japanese investment in the U.S. food processing sector decreased from 2.9 percent of all foreign investment to 1.7 percent in 1989, then rose again to 2.9 percent in 1990. But the dollar value of Japanese investment in food processing grew from \$165 million in 1981 to \$662 million in 1990.

Beyond the ownership of agricultural land, Japanese investors have begun to take advantage of other opportunities in food production and agribusiness to satisfy both Japanese and American con-

Japanese Landholdings Are Small Compared With Other Foreign Investors



Indicates largest foreign landholding nation in each state where Japanese own land. Japan is the largest foreign landholder in Hawaii.

sumer demands. Much of the information in this article was obtained from interviews with Japanese investors in a U.S. orchard, in firms producing Japanese noodles and sake, in a beef processing plant, and in a seed firm. These firms are representative of the types of enterprises in which the Japanese have investments.

A primary reason given for investment in the orchard and beef processing firms was the recent elimination of Japan's beef and citrus import quotas. Eliminating import quotas in these commodities is expected to result in greater shipments to Japan. Like their American counterparts, Japanese investors are eager to supply these products to Japanese consumers. But Japanese ownership also affords the opportunity for investors to expand exports from the U.S. into other markets.

The sake and noodle firms provide opportunities to introduce Japanese food products to American consumers and expand beyond a stagnant and saturated domestic demand in Japan, while saving on transportation and raw material costs. Interestingly, investors in the seed firm indicated that lower labor costs in the U.S. were a factor in investment deci-

sions. Americans frequently assume that their difficulty in competing in many markets is due to high wages relative to other competitors.

Large Expansion Is Unlikely

It is unlikely that a large expansion in Japanese investments in U.S. food and agriculture will occur, since investment decisions hinge on numerous factors, including cultural barriers related to food tastes in both countries. Continued investments in U.S. agricultural land will depend on the exchange rate between the yen and the dollar, and on the ability of the Japanese to obtain financing.

The principal reasons cited by the firms surveyed for investing in the U.S. food sector are to produce food products to satisfy Japanese consumers in both Japan and in the U.S., to take advantage of lower priced inputs, to develop and expand a North American market, and to obtain information about the U.S. market.

Also, U.S. firms have had difficulty selling in Japanese markets because U.S. processing and packaging of many products, such as beef, do not conform to

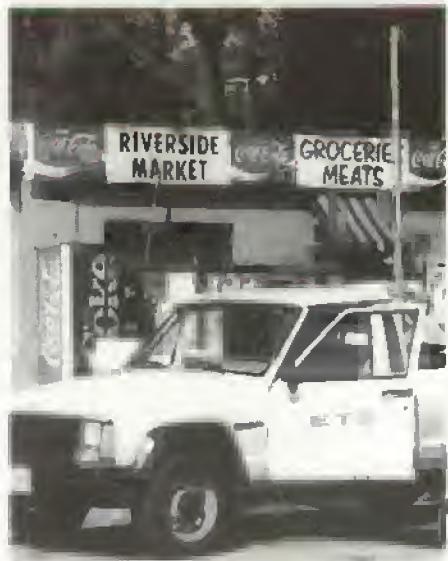
Japanese tastes and preferences. Japanese investment in U.S. firms is one way around this cultural barrier. The U.S. beef industry has several U.S.-Japan joint venture arrangements in ranches, feedlots, and slaughterhouses to meet these needs.

Unlike investments in other U.S. industries, however, the small investments made by Japan in the U.S. food sector are not likely to capture a significant market share. For one thing, food is part of the unique culture of a country, and rapid adaptation to Japanese tastes by American consumers is unlikely.

Also, the size of Japanese-owned companies operating in the U.S. is small in comparison with the size of their parent companies. This is making it difficult for Japanese-owned firms to compete with major U.S. food firms producing similar products, since there is no opportunity to take advantage of economies of scale that larger operations afford. A few firms such as Nissin Foods and Kikkoman have succeeded, however, in becoming major food processing companies in the U.S.

These factors suggest that long and steady effort will be necessary for Japanese food companies to be major competitors in the U.S. market. [Ryuhei Matsunoto, an economist with the Japanese Ministry of Agriculture, Forestry and Fisheries, visited ERS during March-August, 1991. For further information, call Christine Bolling (202) 219-0610] **AO**

Rural Development



Jack Harrison

Will Rural Employment Recovery Be Uneven?

The U.S. economy appears to be recovering from the recent recession. By the end of July, the index of leading indicators had risen for 5 months, employment had stabilized, and real GNP had risen for the first time since the third quarter of 1990—all signs in favor of economic recovery.

As the economy expands, joblessness in metropolitan (urban) and nonmetropolitan (rural) areas might be affected differently. To analyze these possibilities, the Economic Research Service examined historical patterns during similar economic cycles.

This article looks at the response of urban and rural unemployed, discouraged, and "nonemployed" workers to economic recovery and recessions. Quarterly data since 1973 on unemployed, discouraged, and nonemployed individuals were used to detect longrun patterns of change in the numbers of these three jobless groups when U.S.

employment expanded. The period includes the employment expansions following three recessions (1973-75, 1980, and 1981-82).

Workers Without Jobs

"Unemployed workers" are jobless individuals who continue to look for work. Since they are seeking a job, the unemployed are considered labor force participants. The term "discouraged workers" refers to the jobless who desire work but have stopped actively seeking employment. Discouraged workers are not considered as labor force participants, and so are excluded from the ranks of the unemployed in the official statistics. A third group are considered "nonemployed," a broader category of jobless that includes unemployed individuals, discouraged workers, and half the part-time workers who would prefer full-time work.

Policymakers often want to know how jobless numbers in these groups may decline as employment expands, and whether urban and rural groups are affected similarly. One way to provide answers to these questions is to take data on past conditions, and use average patterns to characterize the response of the three groups of urban and rural jobless to the employment expansion expected in 1991. Important factors include the time required for response to begin; directions, patterns, and duration of response; and magnitude of response. Urban and rural comparisons are provided for each of the three groups.

Urban Response Is Stronger Than Rural

Perhaps the most important single finding is that historically, each percentage increase in employment during recoveries has generated a more pronounced percentage decline in jobless rates in urban areas than in rural areas for all three groups. Evidence from the three

About the Models

Three vector autoregression (VAR) models were used to summarize how U.S., rural, and urban employment for the various groups have moved together historically. Vector autoregressions describe relationships of a variable such as rural unemployment to its own past as well as to past values of associated variables, such as U.S. employment. This statistical technique shows how different categories of unemployment are related.

The estimation period, covering three recessions, is 1973-89, and the data are on a quarterly basis. The data, from the Bureau of the Census Current Population Survey, were not seasonally adjusted.

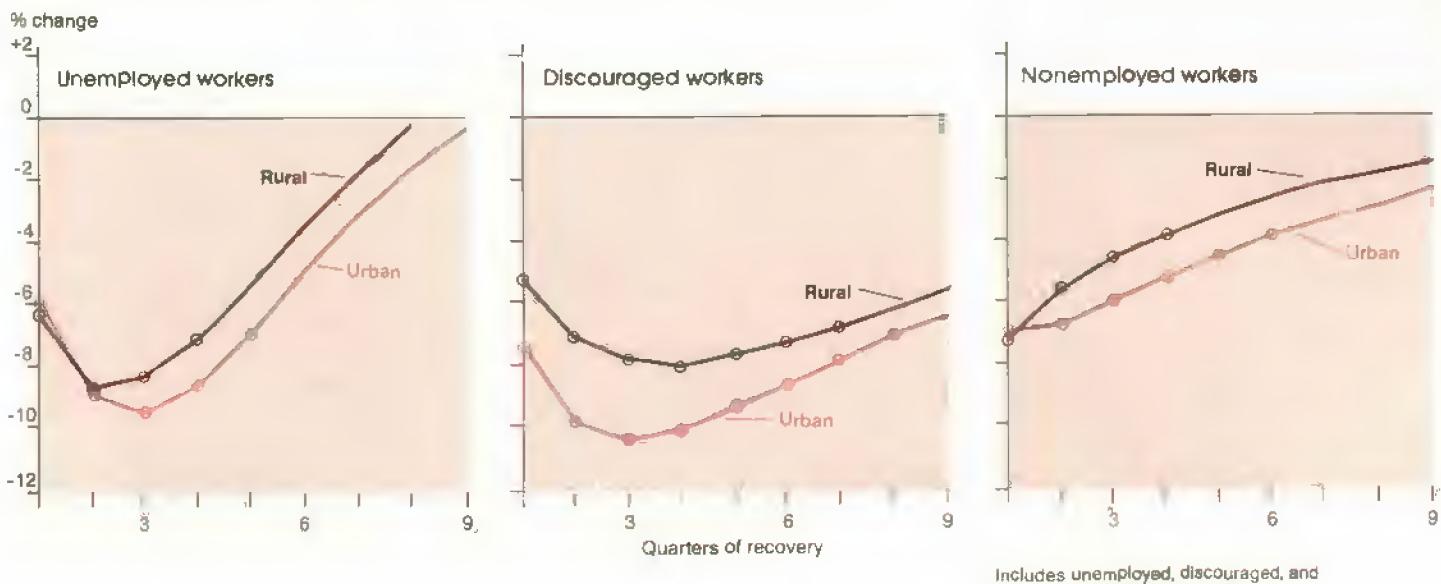
Each model was "shocked" with a 1-percent rise in U.S. employment—a level selected for convenience in

describing results, but which also allows easier extrapolation to different-size shocks which are multiples of a 1-percent rise.

The "unemployment" model contains U.S. employment, and urban and rural unemployment; the "discouraged worker" model contains U.S. employment, and rural and urban discouraged workers; and the "nonemployment" model contains U.S. employment, and rural and urban nonemployment.

The results are presented in terms of percent changes. That is, these figures show percent changes in, not levels of, the work force groups. All responses are presented as declines in unemployment, which are plotted below zero in the accompanying figures. Circled responses are statistically significant—these have a low probability of being explained by chance.

In an Economic Recovery, the Percent Decline in Unemployment Is Greater, More Rapid, and Longer-Lasting for Urban Than for Rural Groups



Includes unemployed, discouraged, and involuntary part-time workers

Percent decline in unemployment each quarter relative to the model's baseline, with an initial 1-percent rise in civilian employment. Circled points are statistically significant--i.e., unlikely to be due to chance.

models suggests that a 1-percent rise in U.S. employment, on historical average, generated:

- declines in unemployed workers of 6.8 percent in rural areas and 7.5 percent in urban areas;
- declines in discouraged workers of 9.1 percent in rural areas and 11.9 percent in urban areas; and
- declines in nonemployed workers of 6.3 percent in rural areas and 7.5 percent in urban areas.

Urban and rural levels of unemployed, discouraged, and nonemployed workers typically begin responding during the same quarter (within 3 months) as the rise in U.S. employment. Declines in urban and rural unemployment and non-employment historically have been more pronounced early in the response cycle, tapering off toward the end of the cycle. Declines in discouraged workers in both urban and rural areas have initially accelerated in strength for two to three quarters, before eventually losing strength toward the end of the response cycle.

Duration of response varies among groups from four to eight quarters. Urban and rural response patterns last from four to five quarters for unemployed workers, seven to eight quarters for discouraged workers, and four to six quarters for nonemployed workers.

Estimated responses of unemployed, discouraged, and nonemployed workers to a rise in U.S. employment reflect the longrun or historical average "standard" responses for the three groups in the two areas. A specific period of economic rebound and employment expansion may differ from the average historical patterns presented here for the post-1973

period. Yet averages are based on evidence and are often useful in characterizing potential events.

Judging by the urban/rural multipliers for each group, urban areas experience a more marked percentage decline in unemployment than rural areas for each point rise in U.S. employment. The relatively longer duration of discouraged worker response suggests that discouraged workers continue to reenter the labor force more than a year after employment starts expanding.

Compared with unemployed, discouraged, and nonemployed workers in urban

As U.S. Employment Rises, Urban Job Response Is Stronger Than Rural

Jobless group	Urban		Rural	
	Multiplier *	Number of quarters	Multiplier *	Number of quarters
Unemployed workers	-7.5	5	-6.8	4
Discouraged workers	-11.9	8	-9.1	7
Nonemployed workers	-7.5	6	-6.3	4

* Percent change in jobless groups generated by 1-percent increase in U.S. employment.

Rural Development

areas, unemployment among the three rural groups, in percentage terms, declines less when times are good and national employment expands, but rises less in bad times when national employment falls.

Rural-Urban Gap Expected To Persist

The difference in the multipliers doesn't tell the whole story about rural versus urban labor force conditions. Rural areas have recorded unemployment rates higher than urban rates for over 10 years, and in addition, they have proportionately more discouraged and involuntary part-time workers than urban areas.

For example, the rural unemployment rate in 1989, the last nonrecession year, was 5.7 percent (urban 5.2 percent). Discouraged workers were 1 percent of the rural labor force (urban 0.6 percent), and the rural adjusted unemployment rate—the rate based on the definition of non-employment given above—was 9.1 percent (urban 7.5 percent).

The rural unemployment rate for 1990 was 5.9 percent compared with a 5.4-percent urban rate, and the adjusted rates were 9.4 percent for rural areas and 7.9 percent for urban areas. Using the above results, and translating them into labor market impacts, it is likely that the rural-urban unemployment rate gap will remain stable over 1991, with the possibility of one- or two-tenths of a percentage point increase.

Those movements in the gap are small by standards of the 1980's. The rural-urban adjusted unemployment rate gap, however, may increase, since rural discouraged and involuntary part-time workers are expected to benefit less from the economic upturn than the corresponding urban groups. [Ronald A. Babula (202) 219-0785] AO

Recession Lingers in Rural Labor Markets

When the period of sustained employment growth that began in 1983 ended in 1990, rural and other areas felt the impact of the national recession. Although unemployment rates have not reached the very high levels of the early 1980's, they have increased significantly since mid-1990.

Historically, unemployment rates fall more slowly in a recovery than they rise in the preceding recession, suggesting that rural unemployment will outlast other effects of the recession.

Still, the farm sector has been less affected by this latest recession than by the 1980-82 recession. And unlike during the earlier recession, the farm sector has not been disproportionately affected.

But rural job market trends are important for farmers, who rely increasingly on off-farm income to ease the vicissitudes of farming.

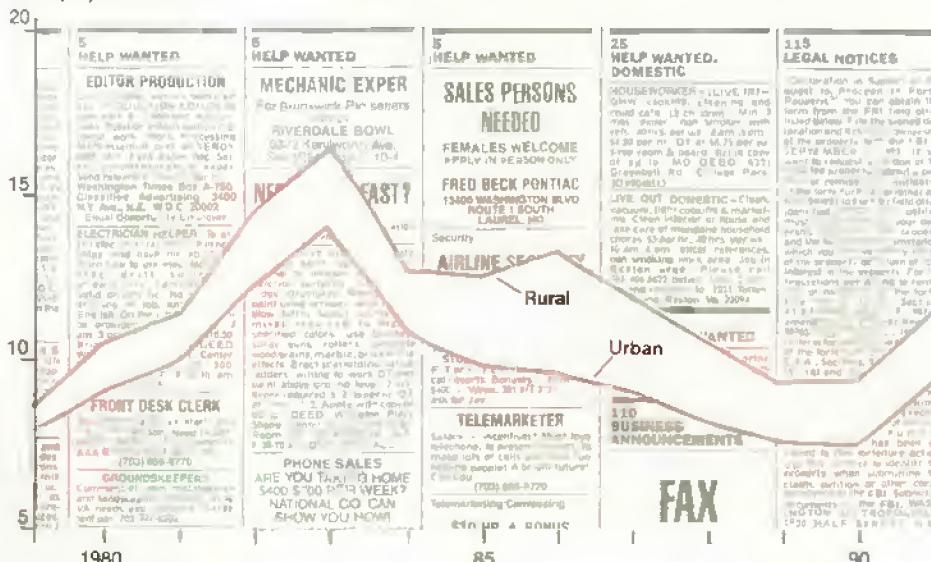
Rise in Unemployment Affects All Groups

The unemployment rate for non-metropolitan (rural) workers increased from 6.1 percent in the first half of 1990 to 7.6 percent in the first half of 1991. It is possible that unemployment will climb still higher, but the most recent national statistics suggest that the recession has likely bottomed out. The rise in unemployment affected all demographic groups. Blacks and teenagers, who already had much higher unemployment rates than whites and adults, experienced the largest increases.

Official statistics tend to underestimate unemployment, especially in rural areas, because the numbers do not reflect discouraged workers or involuntary part-time workers. The adjusted unemployment rate—including individuals in rural areas who have given up looking for work, and half of those who work part-time but who want a full-time job—rose

Rural Areas Still Have Higher Unemployment Than Urban Areas

Unemployment rate



Unemployment rates adjusted to include discouraged workers and those working part-time who desire full-time jobs. 1991 forecast.

Source: Department of Commerce, Bureau of the Census.

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from 9.5 to 11.5 percent over the same period.

The recent recession has affected rural workers about as severely as their urban counterparts. Between the first half of 1990 and the first half of 1991, rural employment fell by 1.1 percent. The corresponding fall for urban workers was similar, at 1 percent.

Data on unemployment also indicate approximately equal rural and urban impacts. The rise in unemployment was 1.5 percentage points in rural areas compared with 1.4 percentage points in urban areas. As is typical in a recession, adjusted unemployment rates rose more than the official measure. However, the urban and rural increases in the adjusted rate were also very similar.

1981-82 Recession Was Worse

The recession that began last year has been milder than the 1981-82 recession, particularly for rural areas. The official rural unemployment rate rose to 11.3 percent in the first half of 1983, well above the 7.6-percent level in the first half of 1991. This difference suggests that the level of economic stress in rural areas has not reached the high levels of the early 1980's.

Perhaps surprisingly, the fall in rural employment was slightly larger in 1990-91 than in the 1981-82 recession. Between the first half of 1990 and the first half of 1991, rural employment fell by 1.1 percent compared with a 0.9-percent decline between the first half of 1981 and the first half of 1983.

But the smaller employment downturn in 1981-83 resulted in higher unemployment rates for two reasons. First, the unemployment rate at the start of the 1981-82 recession was higher than at the outset of the 1990-91 recession (7.9 versus 6.1 percent). Second, the rural labor force grew more rapidly during the 1981-82 recession. Because the number of workers looking for jobs was increasing rapidly in that period, a 0.9-percent reduction in employment resulted in a

Rural Unemployment Is Up....

	First-half 1991	First-half 1990
--- Million ---		
Rural civilian labor force	26.3	26.2
Total employment	24.3	24.6
Unemployed	2.0	1.6
--- Percent ---		
All adult civilian workers	7.6	6.1
Men	8.1	6.3
Women	7.1	5.8
Teenagers	20.3	15.9
White	6.9	5.5
Black	14.7	11.4
Hispanic	9.8	9.7
Adjusted rural unemployment rate*	11.5	9.5

....But Unemployment Rose More in the Previous Recession

	First-half 1990 to first-half 1991	First-half 1981 to first-half 1983
--- Percentage change ---		
Civilian labor force:		
U.S.	0.5	4.5
Urban	0.4	5.2
Rural	0.5	2.9
Employment		
U.S.	-1.0	1.1
Urban	-1.0	2.0
Rural	-1.1	-0.9
--- Percentage point rise ---		
Unemployment rate:		
U.S.	1.5	3.0
Urban	1.4	1.6
Rural	1.5	3.4
Adjusted unemployment rate *		
U.S.	1.9	4.3
Urban	1.9	2.3
Rural	2.0	5.0

*Adjusted to include discouraged workers and half the workers employed part-time for economic reasons.

Source: U.S. Department of Commerce, Bureau of the Census. Data are not seasonally adjusted.

much larger, 3.4-percentage point rise in unemployment.

Another important difference between the two recessions is that rural workers were disproportionately affected by the earlier slowdown, but have not fared significantly worse than urban workers in the more recent slowdown. Urban employment actually rose 2 percent between the first half of 1981 and the first half of 1983, while rural employment fell 0.9 percent.

Urban unemployment did rise during this period, because the 2-percent job growth failed to keep pace with the 5.2-percent increase in the urban labor force. But the rise in urban unemployment was only about half the rural increase. Following the 1981-82 recession, the urban unemployment rate also fell more rapidly than the rural rate.

Differences in the sectoral composition of the two recessions helps to explain the diminished vulnerability of rural areas in

Rural Development

the latest recession. The 1981-82 recession was most severe in the goods-producing sectors, including farming, mining, and import-sensitive manufacturing. Because many rural areas are especially dependent on these sectors, they were among the most adversely affected by the 1981-82 recession and the longer term economic restructuring that it generated. By contrast, continued strong growth in many service industries buoyed urban employment in the early 1980's.

Job losses since July 1990 have been less concentrated in production jobs (especially nondurable manufacturing) than during the 1981-82 recession. Many firms most affected by the more recent recession are clustered in urban areas. Financial institutions are an example, particularly banks that invested heavily in commercial real estate. This difference explains why rural workers have not been disproportionately affected by the current recession, as was the case in the 1981-82 recession.

Outlook for Recovery Still Uncertain

More so than in the 1981-82 recession, the outlook for rural employment is closely tied to the national economy's prospects. Weaknesses in the agriculture, mining, and manufacturing exports sectors delayed the post-1982 economic recovery in many rural areas. The resulting economic shakeout in these areas, while painful, probably means that they are now better positioned to benefit from a national recovery. *(Paul Swaim and Tim Parker (202) 219-0540) AD*

Food and Marketing



Jack Harrison

Small Rise in Food Prices This Year

Forecast food price increases of 2-4 percent in 1991 are far more moderate than the 5.8-percent rise in both 1989 and 1990. The Consumer Price Index (CPI) for food in the first half of 1991 was 3.8 percent above a year earlier. And the CPI for food in the second half is expected to rise at an even slower pace.

Many of the major food categories of the CPI are rising more slowly this year than in 1990. All meat prices, for example, climbed 10.1 percent last year while pork prices rose almost 15 percent, but both are rising only 1-4 percent this year. And processed fruit and vegetable prices are expected to remain unchanged or rise up to 2 percent from a year earlier, compared with a 6.2-percent increase in 1990.

Small declines are expected in poultry and egg prices. The dairy CPI is actually expected to decline as much as 3 percent in 1991 after rising 9.4 percent last year.

The CPI categories for more highly processed foods such as cereals, fats and oils, and other prepared foods, will rise

about the same rate as a year ago. Prices of more highly processed foods are less affected by production swings of the raw farm product and are more susceptible than nonprocessed food categories to inflation pressure in the general economy.

Meat Prices Rise Slowly, Dairy Prices Drop

Red meat production is expected to be higher in second-half 1991 than 6 months earlier. Beef and pork production is expected to average about 5 percent above first-half production. Increased supplies and some easing of retail beef prices will be evident in the third quarter. Lower pork prices will be more evident in the fourth quarter as production increases seasonally.

Increased production of fluid milk and higher inventory of processed dairy products will lead to lower dairy prices in 1991 than last year. Dairy prices rose sharply following the 1988 drought when forage supplies were scarce and production in large milk producing regions declined substantially.

At the same time milk production was down, demand for processed dairy products increased, particularly for cheese and nonfat dry milk. Retail prices for dairy products remained high and showed no sign of easing until the fall of 1990.

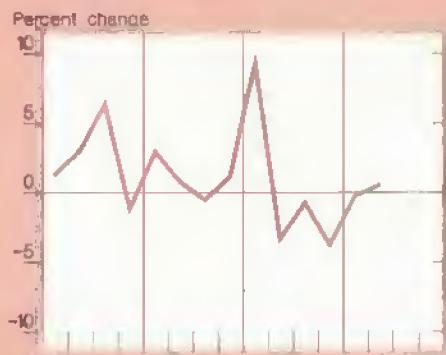
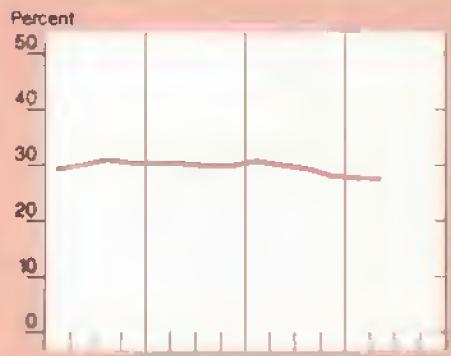
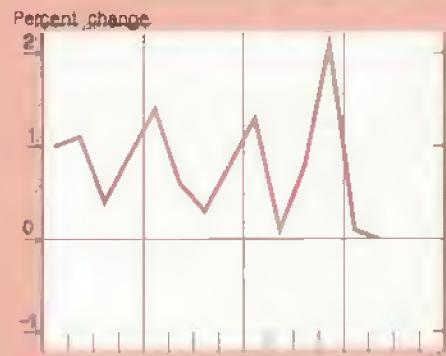
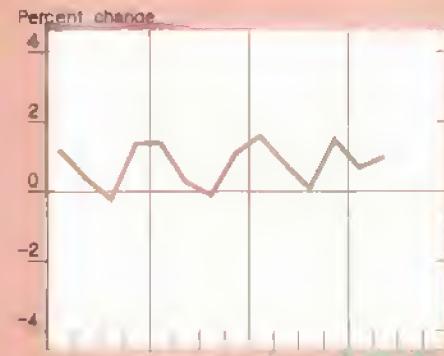
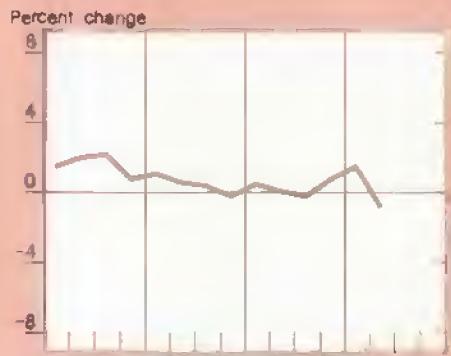
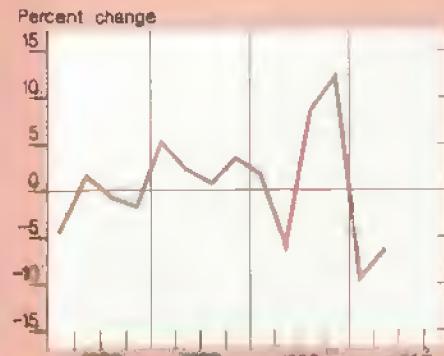
But Fresh Fruit Prices Are Up Substantially

Fresh fruit prices will rise the most among food categories in 1991, averaging 12 to 15 percent above a year earlier. This year's rise in fresh fruit prices is due primarily to poor weather conditions on the west coast. The major weather disruption was the California freeze last December, which reduced the total fresh orange crop over 60 percent from a year earlier. California oranges are produced primarily for fresh consumption markets.

The sharp reduction in market supplies of fresh oranges caused a 35-percent increase in retail prices in January and further increases in the following months.

Food and Marketing Indicators

Food and Marketing

CPI: Total food^aCPI: Food at home^aCPI: Food away from home^aRetail cost of food^bFarm value of food^cFarm-retail spread^cFarm value/retail cost^cFood marketing cost index^dIndex of hourly earnings^{e,f}Index of packaging prices^dIndex of rail freight rates^dIndex of energy rates^d^aCPI unadjusted ^bIndex based on market basket of farm foods ^cIndex of changes in labor, packaging, transportation, energy, and other marketing costs^dIn food retailing, wholesaling, and processing. ^eComponent of food marketing cost index

All series expressed as percentage change from preceding quarter, except for 'Farm value/retail cost' chart

Food and Marketing

Food Prices Are Rising More Slowly Than a Year Ago

	1988	1989	1990	Forecast 1991
	% change			
Consumer price index				
All food	4.1	5.8	5.8	2 to 4
Food away from home	4.1	4.6	4.7	3 to 5
Food at home	4.2	6.5	6.5	2 to 4
Meat, poultry, and fish	3.5	5.0	7.3	1 to 3
Meats	2.4	4.0	10.1	1 to 3
Beef and veal	5.5	6.4	8.0	2 to 4
Pork	3.0	0.6	14.7	1 to 3
Other meats	2.6	2.8	9.3	2 to 4
Poultry	7.2	9.9	-0.2	-1 to 1
Fish and seafood	5.8	4.5	2.2	1 to 3
Eggs	2.3	26.6	4.7	-4 to -1
Dairy products	2.4	6.6	9.4	-3 to 0
Fats and oils	4.6	7.2	4.2	5 to 7
Fresh fruits and vegetables	7.6	8.5	8.0	5 to 7
Fresh fruits	8.3	6.6	12.1	12 to 15
Fresh vegetables	6.3	10.7	5.6	3 to 6
Processed fruits & vegetables	7.9	6.3	6.2	0 to 2
Processed fruits	10.3	3.2	8.7	-2 to 0
Processed vegetables	4.8	10.7	2.7	2 to 4
Sugar and sweets	2.7	4.7	4.4	3 to 5
Cereals and bakery products	6.4	8.4	5.7	4 to 6
Nonalcoholic beverages	0.0	3.5	2.0	1 to 3
Other prepared foods	3.7	6.4	4.5	4 to 6

Source of historical data: Bureau of Labor Statistics, U.S. Department of Labor. Forecasts by Economic Research Service, USDA.

Orange prices remained well above a year earlier for the entire season. Higher prices for oranges will likely persist into the 1991/92 season because damage to the orange trees caused by the freeze will limit production recovery.

Smaller supplies of oranges have also put pressure on supplies of other fresh fruits, causing prices of noncitrus fruits to rise as well. Rains and cool weather have affected the fresh fruit supplies from the west coast. Development of most stone fruits was slowed by the cool weather, and harvests were delayed about 2 weeks, causing gaps in market supplies and higher prices.

Most other categories of the food CPI will change very little from a year ago. The processed fruit CPI is expected to decline because of increased supplies and lower prices of oranges used for processing. Oranges used for producing orange juice come largely from Florida and were not affected by the December freeze that damaged the California crop.

Other food CPI changes will be small, and well within the all-food forecast range. (Ralph Parlett (202) 219-0870) **AO**

Labor Costs Drive Food Bill

Marketing costs, the major component of food prices, have risen from 69 to 76 percent of the total cost of food over the last decade. The farm value of commodities accounts for the remaining portion of the retail price of food.

Labor is by far the largest factor in food marketing costs, accounting for 46 percent of the total. Higher labor costs were primarily responsible for the 5.9-percent increase in the marketing bill for farm

food products between 1989 and 1990. Labor costs rose 6 percent in 1990 to \$154 billion, up from a 5.2-percent increase a year earlier. The increase largely reflected rising employment in the food industry and the soaring costs of employee benefits.

Nearly 12.5 million people work in the food industry. Employment in eating and drinking establishments accounted for 53 percent of the industry's labor force, increasing 2.3 percent in 1990 from a year earlier. Retail outlets made up about 27 percent of industry employment, and food manufacturing and wholesaling employed the remainder.

Food retailing employment rose 3.3 percent in 1990 from a year earlier, reflecting the continued growth of service departments such as delicatessens, salad bars, and bakeries in supermarkets. By contrast, food manufacturing employment grew only 0.3 percent. And this was largely due to a 4-percent gain in the number of employees in poultry dressing plants to meet increasing demand for poultry products.

Health Benefits Are Key Factor in Labor Costs

Health benefits are the biggest issue affecting the current labor picture in the food industry. In 1990, health benefits became the top issue on the bargaining table as health costs escalated rapidly.

Benefits total approximately 20 to 25 percent of food industry labor costs, and health insurance premiums have been rising as much as 50 percent a year. Increased health insurance premiums are often paid for with money that otherwise would go to wage increases. Health care issues likely will be the single largest cause of labor-management conflict over the next few years.

Employers are exploring a number of cost containment methods. These include requiring a second medical opinion and approval by insurance carriers prior to surgery, and participation in health maintenance organizations. Employers have also tried to shift some costs direct-

ly to employees through higher deductibles and co-payment schemes. Some health insurance plans have reduced benefits, while others have required employees to pay a larger share of the premium.

Higher Social Security taxes are also a major cause of increased employee benefit costs. Employers experienced a sizable increase in Social Security payroll taxes in 1990 because of an increase from 7.51 to 7.65 percent in the Social Security tax rate on wages. Although the maximum taxable wage has also risen, from \$48,000 to \$51,300 in 1990 and to \$53,400 in April 1991, these increases are unlikely to affect most food industry employees.

Contracts Helped Slow Labor Cost Increases

Management and organized labor jointly developed a number of techniques—featuring wage concessions and innovative contract provisions such as back-loaded contracts and lump sum payments—to hold down average earnings and benefits in the mid- and late 1980's while maintaining employment levels. A slowing of growth in labor costs was largely the result of contracts negotiated during this period.

These contracts held down growth in labor costs during the late 1980's largely because they were typically negotiated for 3-year periods. Therefore, settlements negotiated in 1987 and 1988 influenced labor costs in 1989 and 1990. Similarly, the results of 1990 contracts should have an impact on labor costs through 1993.

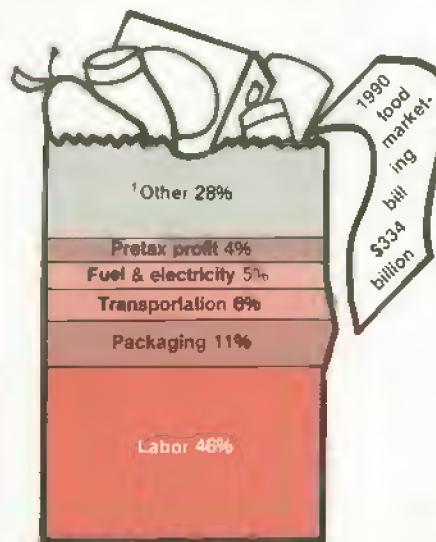
Unions have recently begun to demand restoration of concessions granted during the mid-1980's. And many other cost-cutting techniques developed during this period are being phased out as higher inflation in 1989/90 prompted unions to demand larger wage increases.

For example, lump sum payments were once a popular method of holding down labor costs. The payments were made to workers in lieu of increasing the wage rate base used to calculate benefits and future wage increases. Up to 35 percent of all food retail workers were covered by these provisions during the late 1980's. Lump sum payments have been largely eliminated from 1990 contract settlements.

Collective bargaining settlements in food manufacturing and retailing in 1990 provided larger wage adjustments than the contracts they replaced. The renewed importance of wages at the bargaining table is reflected in the 1990 hourly wage rate increase which was the largest since 1983.

This development is reflected in the renewed prevalence of front-loaded contracts, in which the largest wage increase occurs in the contract's first year. These settlements compound the amount of the percentage increases in wages in the second and third years of the contract.

Labor Is the Largest Expense In the Food Marketing Bill



¹Depreciation, rent, advertising, interest, taxes, insurance, licenses, food service, and miscellaneous items.

By contrast, back-loaded contracts provide lower wage increases in the first year of a contract relative to subsequent years. They dampen wages by basing increases in the latter years of a contract on a lower initial wage.

For example, 1987 food retailing contracts were primarily back-loaded, averaging 0.5 percent in the first year and 1.6 percent annually over the life of the contract. In contrast, 1990 contracts were largely front-loaded, with average increases of 4.6 and 3.8 percent.

Higher Minimum Wage Affects Food Prices

Wage gains for all union workers have trailed nonunion increases since March 1984. In 1990, union workers for all industries received an average increase of 3.4 percent, versus 4.2 percent for nonunion workers.

This reflects nonunion workers' lower initial wage base. Management had to grant higher increases in order to bring nonunion wages more in line with wage and benefit packages received by union workers. This trend means that any increase in union wages could be magnified, translating into higher industry-wide labor costs.

The percentage of unionized workers at foodstore chains fell from 52 percent in 1989 to 45 percent in 1990. The decline largely reflects an industry practice of operating nonunion stores in new locations. Nonunion competition was a major issue at the bargaining table.

Finally, the minimum wage increased to \$4.25 an hour on April 1 of this year, following last year's increase from \$3.35 to \$3.80 an hour. The biggest impact will be felt in the nonunionized segment of the food industry—especially eating establishments. The main impact from the minimum wage increase will be felt this year, barring any further legislative initiatives to increase the minimum wage.

[Howard Elitzak (202) 219-0870] AC

Special Articles



USDA Soil Conservation Service/Gene Alexander

How the CRP Affects Local Economies

The removal of ecologically fragile farmland from crop production, encouraged under the Conservation Reserve Program (CRP), sets in motion a series of economic effects on the local communities. With acres of previously cultivated land covered with grass or trees, a farmer's economic relationship with the local business sector inevitably changes.

The CRP, authorized by the Food Security Act of 1985, retires highly erodible farmland from production for a period of 10-15 years. In exchange for taking land out of production, farmers receive an annual per-acre rent to compensate for foregone output, and half the cost of establishing vegetative land cover, usually grass or trees.

Like annual supply control programs such as acreage reduction (ARP) and paid land diversion (PLD) programs, the CRP affects both local communities and the overall economy when land is retired. Locally, a farmer who plants fewer acres reduces purchases of seed, fertilizer, and fuel; operating capital and farm equipment needs are less, equipment life is extended; and repair costs are reduced. These changes affect income and spending patterns for farmers and the local economies.

Economic activity in industries linked to agriculture, such as transportation and processing, can decline with lower production resulting from the CRP, just as with other programs that decrease production. These effects tend to be concentrated in

areas where agriculture is a dominant activity and where CRP enrollment is high.

In order to address concerns that the CRP could adversely affect local businesses in high enrollment areas, enrollment is generally limited to 25 percent of a county's cropland.

From March 1986 through August 1989, nine signup periods were held, enrolling 33.9 million acres of cropland in the CRP. Under the extended enrollment authority provided by the 1990 Food, Agriculture, Conservation, and Trade Act, two additional signups were held in March and July 1991. These latest signups may bring an additional 1.6 million acres into the program.

Tradeoffs for Farmers & Communities

For individual farmers, the CRP contributes to increased control of erosion, reduced farming activity, more stable farm income, and prospects for increasing net farm income.

If the CRP improves a farmer's cash-flow position, more capital purchases can be made in the future, debt can be reduced, or savings increased. These benefits accrue to the farmer. Benefits to the local community include environmental quality improvements and, when farming expenses are reduced, more widely distributed farm household expenditures. However, local economic activity will be adversely affected if farm household spending shifts outside the community.

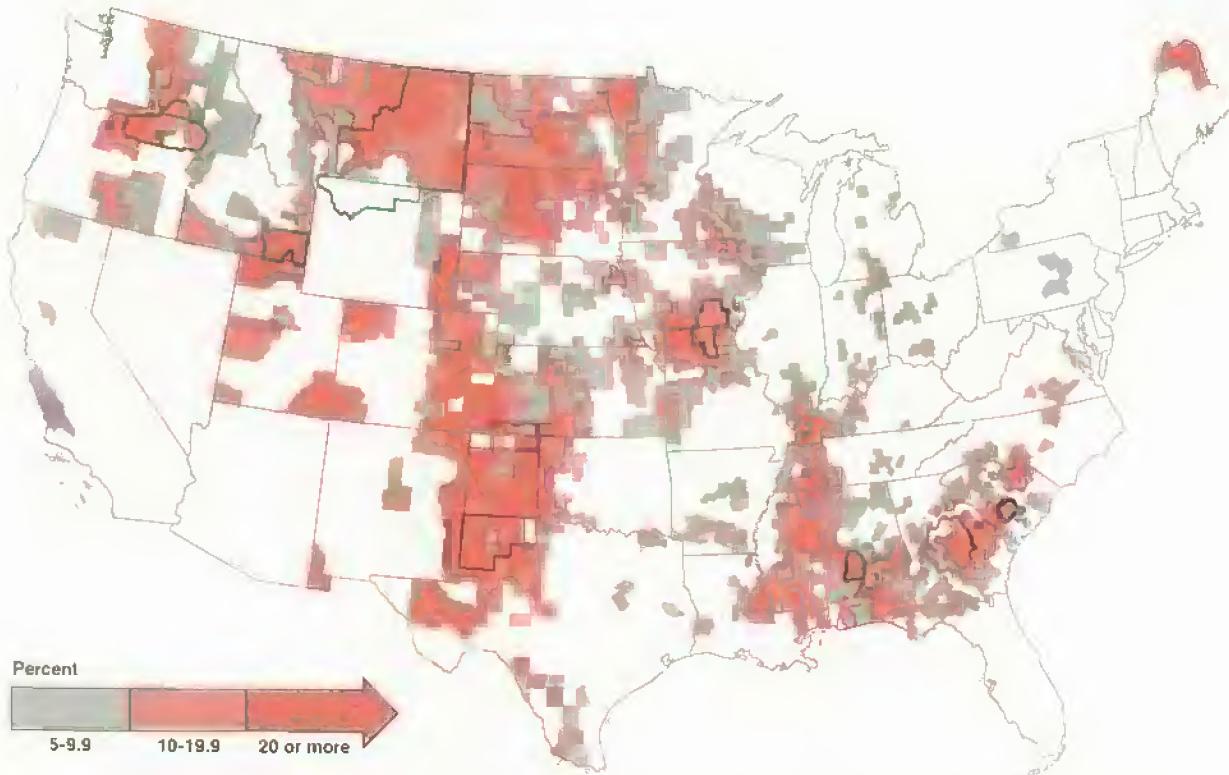
The replacement of cash receipts from crop sales with cash rental payments from the federal government means a shift in expenditure patterns. Funds previously spent for farm production—variable inputs such as fertilizer, seed, machinery repair, labor, and fuel—are released for other uses, including consumer purchases. As with previous expenditures, some of these expenditures may be made outside the local community.

When local agribusiness firms provide services or are the suppliers of manufactured agricultural inputs, and land is taken out of production, these firms lose income. Lower sales of inputs are partially offset by purchases for grass or tree establishment in the first year of retirement, and by input purchases for cover maintenance through the remaining years of retirement.

Farmers also receive less gross income from sales, due to reduced crop production and lower deficiency payments from program crops. But the lower gross income from sales is at least partially, and in some cases, more than offset by CRP rental payments, and in the first year, half the cost of payments for grass establishment. At the same time, variable expenses for production are reduced.

CRP rental payments are based on producer bids and vary with the productivity of land removed from production. Through the ninth signup, the average rental rate was \$48.93 per acre. Preliminary data from approved 10th signup bids show a higher average rental rate of \$53.96 per acre, with the highest rental

CRP Enrollment Varies by County



Share of cropland enrolled in CRP as of 9th signup. Areas designated with less than 5 percent enrollment include counties with no cropland, no enrollment, or that provided no data.

rate in the Corn Belt and the lowest in the Mountain region. The CRP bid reflects farmers' projections of annual net farm income from usual cropping patterns over 10 years, and the cost of cover establishment and maintenance, but without the expected annual fluctuations of net farm income.

Local Impacts Depend On Several Factors

The impact of the CRP on a local economy depends on:

- the percent of cropland enrolled in the CRP (the enrollment rate);
- the diversity of the local and regional economy;
- the distribution of total farm sales by crop; and
- the crop production foregone on acreage enrolled in the CRP.

For the nation as a whole, where CRP acreage represents less than 8 percent of all cropland and the farm production sector accounts for less than 5 percent of all economic activity, changes in spending patterns due to lower production are of little consequence.

With a given enrollment rate, however, local and regional impacts will be greater in areas where the farm sector is a dominant economic activity, crop production is a major activity in the farming sector, and the foregone crops have a high per-acre value in terms of inputs and sales. Local impacts are largest in the Plains states where enrollment rates often exceed 10 percent of all cropland and farming plays a major role in the regional economy.

ERS examined local impacts of the CRP on 10 local economies of multicounty trading areas defined by Rand McNally, in four regions—the West, Great Plains, Corn Belt, and the Southeast. The economic impacts include shifts in income and expenditure patterns that arise when crop sales and government payments for program commodities are decreased, purchases of variable inputs are reduced, and CRP rents provide a new source of income.

Special Articles

Farm Dependency Varies By Area

Region/area	Share of total employment (1987)		Share of farmland in crops	CRP enrollment *	
	Farming	Agnbusiness		Total acres	Share of total cropland
----- Percent -----					
West:				Percent	
Walla Walla, WA	16.0	9.9	46.5	429	16.9
Pocatello, ID	10.4	8.6	57.7	341	30.2
Great Plains:					
Billings, MT	13.2	2.6	23.6	1,529	18.5
Liberal, KS					
Guymon, OK	20.1	12.2	44.4	566	22.7
Lubbock, TX	10.4	5.2	60.0	1,340	24.5
Com Belt:					
Kirksville, MO	23.8	9.6	66.2	167	17.6
Ottumwa, IA	20.5	8.4	75.6	230	14.5
Southeast:					
Selma, AL	10.7	12.2	44.2	74	29.6
Macon, GA	4.7	9.2	58.9	217	19.3
Orangeburg, SC	8.8	7.1	69.5	68	20.8

* Through the 9th signup.

Much of CRP Coverage Was Formerly Planted to Wheat

Region/area	CRP acres formerly planted to:							
	Wheat	Corn	Barley	Sorghum	Soybeans	Cotton	Oats	Fallow
Percent of total enrollment								
West:								
Walla Walla, WA	53.4	—	29.4	—	—	—	0.3	16.9
Pocatello, ID	36.7	—	30.9	—	—	—	—	32.4
Great Plains:								
Billings, MT	40.1	—	21.2	—	—	—	2.3	36.4
Liberal, KS								
Guymon, OK	51.7	—	—	28.9	—	—	—	19.4
Lubbock, TX	15.7	1.5	—	15.4	—	51.9	—	15.5
Corn Belt:								
Kirksville, MO	19.4	17.6	—	2.9	60.1	—	—	—
Ottumwa, IA	3.5	43.8	—	—	48.6	—	4.1	—
Southeast:								
Selma, AL	35.7	4.5	—	—	58.4	1.4	—	—
Macon, GA	41.6	12.8	—	—	43.0	2.6	—	—
Orangeburg, SC	28.3	16.8	—	—	51.7	3.2	—	—

The estimated economic impacts presented here should be considered upper-bound estimates, covering a period of several years. They should be viewed this way because, if the CRP were not in effect, acreage retirement under other annual programs such as ARP and PLD would be higher, providing some of the same effects as the CRP.

Also, other factors, such as the present and future value of environmental benefits for farm productivity and the local community, as well as increased income from other sources of economic growth, are not included here. These factors would mitigate or offset some reported declines in activity associated with the CRP.

Each of these multicounty areas was selected because of its relatively high CRP participation—15 percent or more of total cropland. Individual counties in a Rand-McNally area may have greater or smaller enrollment rates. Enrollment varies among the 10 areas, from 68,000 acres in the Orangeburg, South Carolina area of the Southeast region to 1.53 million acres in the Billings, Montana area.

In addition, the share of farmland in crops in these areas is high. In 9 of the 10 areas examined, more than 40 percent of farmland is engaged in crop production. Only in the Billings, Montana area of the Great Plains region is the share of land in crops low—approximately 24 percent.

Effects of Spending Patterns Depend on Economic Diversity

The estimated economic effects of acreage retirement under the CRP depend in part on the economic diversity of the area and on the particular crop removed from production.

One measure of diversity in these multicounty areas is the importance of the farm sector. The share of total employment in farm production and agribusiness ranges from less than 14 percent in the Macon, Georgia area (Southeast region) to over 33 percent in the Kirksville, Missouri area (Corn Belt region). The greater diversity in some local economies, indicated by lower employment related to agriculture, tends to lessen economic impacts of changes in income and spending patterns from decreased crop production.

Even in these areas of high CRP enrollment, the impact of changes in income and spending patterns associated with acreage retirement is small. In the two areas of the West, the potential impacts related to the CRP are 2-percent declines in area economic activity. Potential impacts in the Great Plains vary from less than a 1-percent decline in economic activity in the Billings, Montana area to a 3.5-percent fall in the Lubbock, Texas area.

Impacts in the Corn Belt are the greatest, with potential declines of 5.7 and 3.2 percent in economic activity in the areas of Kirksville, Missouri and Ottumwa, Iowa. But in the Southeast region, the potential impact on economic activity related to the CRP is small, less than 1 percent in each of the three areas.

Acreage enrollment alone provides only part of the picture of CRP-related impacts. Simply because an area records high enrollment in the CRP does not mean the area will experience stronger economic impacts from the program. The type of crop removed from production also plays a role.

For example, the Billings, Montana area has the largest number of acres in the CRP in this study—over 1.5 million. But the estimated economic impacts in this area are less than 1 percent, partly reflecting the previous use of land removed from production.

The retired acreage replaced a wheat-barley-fallow cropping pattern. Without the CRP, the land generates low income because wheat and barley yields are low, and one-third of the acreage is summer fallow in any given year. Thus, the CRP boosts income in this area with payments on land that in some years produces no income. Also, more than 84 percent of this area's employment is nonagricultural, so farm dependency is not high.

What's Behind the Results?

A regional input-output model called IMPLAN (Impact Analysis for Planning) was used to derive the potential economic impacts associated with the CRP. IMPLAN was developed by USDA's Forest Service and covers 528 industries at the county level.

An economic shock is introduced into the model, and subsequent income and employment effects can be traced through industries and regions. Although the impact of CRP is actually phased in during a series of signups and is phased out over several years as CRP contracts expire, the IMPLAN analysis discussed here considers cropland retired during the first nine signups as a single shock. In addition, calculation of the shock does not consider the mitigating effect of crop price increases from CRP-induced supply reduction nor the value of increased environmental quality.

Furthermore, the reduced level of economic activity indicated here is for the years of grass maintenance (years 2-10) rather than the first-year grass establishment. Impacts are less during the first year because substantial expenditures for establishing a cover crop (approximately \$40 per acre) offset more of the impact of reduced crop production than does the subsequent \$5-per-acre grass maintenance expenditure.

In the analysis, the "shock" is calculated as follows:

Rental payments to farmers

+ grass maintenance costs (years 2-10)

- crop sales foregone

- government payments foregone

= total economic shock.

This net impact is aggregated for all CRP acres recorded in each multicounty area and is used as the shock in IMPLAN to trace economic impacts in farm-related sectors as well as the overall area economy.

CRP rental payments to farmers reflect actual bids across all CRP acres enrolled in the regions covered in this study. Grass establishment costs are actual costs reported by farmers. Annual grass maintenance costs paid to farmers are assumed to be \$5 per acre. Crop sales foregone are calculated using USDA records on the number of acres of specific crops in the region removed from production, regional crop yield data from the Census of Agriculture, and state commodity prices published in *Agricultural Prices*. Government payments foregone are calculated using program yield data and 1989 deficiency payment rates for each crop taken out of production.

Special Articles

Potential CRP Impacts Are Small For Most Local Economies

Region/area	Change in economic activity*
	Percent
West:	
Walla Walla, WA	-2.1
Pocatello, ID	-1.9
Great Plains:	
Billings, MT	-0.9
Liberal, KS	
Guymon, OK	-1.5
Lubbock, TX	-3.5
Corn Belt:	
Kirksville, MO	-5.7
Ottumwa, IA	-3.2
Southeast:	
Selma, AL	-0.8
Macon, GA	-0.3
Orangeburg, SC	-0.8

* Reduction in economic activity measured in terms of sector income.

However, economic impacts in the Kirksville, Missouri area are estimated to be more pronounced, even though CRP enrollment is relatively low. Among the West, Plains, and Corn Belt regions, this area recorded the fewest acres in the CRP, only 167,000. But over 33 percent of the employment is agriculture-related, the highest of any area in the study. Of the acres enrolled in the CRP, over 60 percent replaced soybeans, with the remaining acreage replacing wheat (19 percent) and corn (18 percent).

The potential economic impacts reflect the importance of farming in this area. The level of economic activity in the Kirksville, Missouri area is estimated to be 5.7 percent lower due to the changes in spending patterns arising from acreage retired under the CRP.

In the two areas examined in the Western region, CRP enrollment and farm dependency are quite different. In the Pocatello, Idaho area, over 30 percent of the cropland is enrolled in the CRP, but only 19 percent of employment in this area is agriculture-related. By contrast, just 17 percent of the cropland in the Walla Walla, Washington area is enrolled in the CRP, but 26 percent of all employment is agriculture-related.

Moreover, summer fallow accounts for nearly a third of the total acreage enrollment in the Pocatello area. Since summer fallow acres generate no income in some years, but enrollment in the CRP earns a rental payment every year, income from the CRP further offsets potential gross income declines from reduced production. In these two areas, the offsets between farm dependency and acreage enrollment mean the potential impacts of the CRP are roughly similar. The study estimated the potential declines in economic activity at about 2 percent for both areas.

CRP Impacts Extend Beyond Local Areas

The CRP affects the nation and the entire rural economy in diverse ways. The CRP contributes to increased erosion control, improved water quality, reduced surplus commodities, and more stable income for farmers. The CRP also provides increased wildlife habitat, with possible associated increases in recreation income to local economies.

Program costs for the CRP will be partially offset by smaller outlays for surplus program commodities, including deficiency payments and storage costs. With less land in cultivation, crop production declines and commodity prices are buoyed somewhat. With water quality and wildlife values improved, land values increase.

The estimated economic impacts related to different spending patterns associated with the CRP in 10 areas of the nation suggest that the CRP will not severely affect economic activity in any of the areas. Some selected businesses, however, such as farm input suppliers, are likely to be more strongly affected by the CRP. *[Fred Hines, Judith Sommer, and Mindy Petrulis (202) 219-0525] AO*

Upcoming Reports from USDA's Economic Research Service

The following are September release dates for summaries of the ERS reports listed. Summaries are issued at 3 p.m. Eastern time.

September

- 5 Western Europe
- 11 Agricultural Income & Finance
- 17 Tobacco
- 18 Sugar & Sweeteners
- 19 Fruit & Tree Nuts
- 20 Agricultural Outlook
- 23 Agricultural Resources—Cropland, Water, & Conservation
- 25 Aquaculture



Canadian Embassy (Tourism)

Canada's GRIP Program: A Boon for Wheat Producers?

Beginning with the 1991/92 Canadian crop year, Canada's Gross Revenue Insurance Plan (GRIP) provides a new safety net for grain and oilseed producers. The program, one of Canada's most significant pieces of agricultural legislation in the last 50 years, is designed to help stabilize farm incomes by reducing the revenue risk from yield and price variability.

GRIP has received considerable attention in recent months, mainly because it offers support for many crops at levels that are above current world prices. It also offers coverage for some crops that have received much lower support in the past. Although GRIP covers several crops, this article focuses on wheat.

Because of its broad crop coverage and relatively high support price, many analysts believe that GRIP will provide a "boon" to Canadian farmers. According to the Canadian government, estimated outlays under GRIP could reach Can\$2.7 billion in 1991/92 (August-July), nearly Can\$1 billion more than 1989/90 budget outlays for grains and oilseeds, but considerably less than the Can\$3.6 billion in 1987/88.

GRIP is a voluntary program jointly funded by farmers, provincial governments, and the Federal government. GRIP is designed eventually to supplant current safety net programs,

including the Western Grain Stabilization Program, the Agricultural Stabilization Act, and other program support of recent years, such as the Special Canadian Grains Program.

Producers Have Options Under the New Plan

Farmers who enroll in GRIP must pay a premium, which varies with the program options: crop and revenue insurance, revenue insurance only, or crop insurance only.

The choice of program option affects the likelihood of collection. If both prices and yields are high, the farmer would not collect under any of the options. If prices are low and yields are high, farmers who signed up for revenue insurance alone or both crop and revenue insurance might be able to collect. But a farmer who signed up only for crop insurance would be unlikely to receive a payment in this case.

Crops eligible for GRIP include wheat, barley, oats, canola, soybeans, rye, flaxseed, mustard seed, canary seed, mixed grain, and perennial crops. All of a participating farmer's production of eligible crops receives protection. Commodities not eligible, including livestock, sugarbeets, and horticultural products, will continue to receive price support under previously established programs.

For either of the revenue insurance options, GRIP guarantees minimum levels of "target revenue." Farmers receive a GRIP payment when the market revenue for a crop falls below the target revenue. The target revenue, established at planting time, is obtained by multiplying:

- the farmer's historical yield—based on a long-term average yield;
- the farmer's seeded acreage;
- the province's support price—based on a 15-year average of market prices, indexed for input costs, known as the Indexed Moving Average Price (IMAP); and
- the established coverage level—for 1991/92, the minimum coverage level is 70 percent of the province's IMAP.

Market revenue, calculated at the end of the crop year, is obtained by multiplying:

- the weighted-average market price received over the crop year in the province for the grade of commodity produced by the farmer;
- the farmer's actual yield; and
- the farmer's seeded acreage.

Special Articles

GRIP Support to Wheat Producers Depends on Market Conditions

	Unit	Low price-low yield	Low price-high yield	High price-low yield
1. IMAP ¹	Can\$/bu	5.71	5.71	5.71
2. Coverage level	Percent	70	70	70
3. Crop insurance:				
4. Elected coverage	Percent	70	70	70
5. Yield guarantee = coverage x historical yield	Bushels	21	21	21
6. Expected GRIP revenue premium/acre	Can\$	10-13	10-13	10-13
7. Enrolled acres	Acres	500	500	500
8. Historical yield/acre	Bushels	30	30	30
9. Actual yield/acre	Bushels	19	32	19
10. Actual market price	Can\$/bu	2.50	2.50	3.30
11. Target revenue = (1 x 2 x 7 x 8)	Can\$	59,955	59,955	59,955
12. Market revenue = (7 x 9 x 10)	Can\$	23,750	40,000	31,350
13. Crop insurance payment = ([5-9] x 7 x 10)	Can\$	2,500	0	3,300
14. Revenue insurance payment = (11 - 12 - 13)	Can\$	33,705	19,955	25,305
15. GRIP support = (13 + 14)	Can\$	36,205	19,955	28,605
16. Total return from GRIP and market = (12 + 15)	Can\$	59,955	59,955	59,955
Share of support from:				
GRIP—revenue insurance	Percent	56	33	42
crop insurance	Percent	4	0	6
Market revenue	Percent	40	67	52
Returns/acre:				
Total (\$59,955 / 500 acre)	Can\$	119.91	119.91	119.91
GRIP Support per acre	Can\$	72.41	39.91	57.21
Market return per acre	Can\$	47.50	80.00	62.70
Net gain from GRIP: ²				
Total support/acre	Can\$	60.91	28.41	45.71
- market return/acre				
- revenue premiums/acre				

¹ Indexed moving average price. ² Net gains exclude premiums paid for crop insurance.

Farmers who buy only crop insurance receive a payment when their actual yield falls below their historical yield multiplied by the established coverage level.

Unlike the U.S. grain programs, GRIP does not require farmers to reduce their planted acreage in order to receive benefits. However, GRIP places a 10-percent cap on the increase in a farm's total seeded acreage for 1991/92 over the farm's average acreage of the last 3 crop years. This cap applies in all provinces.

Except in Saskatchewan, GRIP does not control the individual crops a producer can plant within this seeded acreage base. Saskatchewan has placed a 20-percent cap on any individual crop acreage increase over 1990/91 acreage.

GRIP Offers Higher Prices Than CWB This Year

GRIP support prices for wheat, based on 70 percent of an individual province's Indexed Moving Average Price, were announced for the Prairie Provinces—Canada's main grain-producing area—in March 1991. Because the IMAP is based on a 15-year average of market prices, it includes the relatively high prices of the late 1970's and the early 1980's.

As a result, GRIP support prices exceed the Canadian Wheat Board's (CWB) initial prices. (Initial prices have been a major form of government support for Prairie Province grain since 1935.) For red spring wheat, the dominant Prairie Province

grain, the 1991/92 GRIP support price of Can\$4.15 per bushel exceeds the 1991/92 CWB initial price (Can\$2.59) by 60 percent. For durum, the GRIP support price is Can\$4.49 compared with the CWB initial price of Can\$2.45.

Because GRIP payments are not scheduled to be made before the end of the crop year, there is speculation that an interim GRIP payment might be made before then. This is a consequence of the low level of initial CWB payments for wheat in 1991/92. These are the lowest initial CWB prices in 16 years.

GRIP Participation High, But Lower than Expected

While the CWB will continue its initial payment policy, the IMAP is a dominant factor this year affecting farmers' decisions on GRIP participation and on which crops to plant.

Despite the high GRIP support price, final enrollment data show GRIP participation at lower levels than many observers expected early in the spring. Agriculture Canada released survey data in early June indicating that 127,335 farmers had signed up by the May 15 deadline. This represents about 75 percent of eligible farms and 83 percent of eligible acreage. Early in the spring, some analysts estimated that GRIP enrollment would reach 90 percent.

Enrollment varies widely by province. Among the Prairie Provinces, Saskatchewan pegged the highest enrollment with 90 percent of eligible acreage, compared with 80 percent for Manitoba and 75 percent for Alberta. Ontario's enrollment was 80 percent.

Several factors may account for lower enrollment than expected. Some farmers surveyed by Agriculture Canada indicated that the program did not apply to their farms or that they did not grow enough grain to make the program worthwhile. In the Prairie Provinces, this is most evident in Alberta, which is relatively more dependent on cattle operations.

Also, because GRIP is a new program, farmers face a "learning curve" reflected in hesitation about new or unfamiliar program provisions and operation. In addition, CWB initial prices had not been released as of the May 15 deadline.

GRIP Support Is Much Higher Than Canadian Wheat Board Prices

Wheat class	GRIP support price, 1991/92	CWB initial price, 1991/92
	Can\$/bu	Can\$/bu
Red spring	4.15	2.59
Durum	4.49	2.45

Acreage Is Influenced By GRIP Incentives

Planting decisions depend heavily on analysis of expected profitability, including a comparison of market net returns and GRIP net returns. Crop rotations and weather conditions are also important variables. It is difficult to isolate the influence of GRIP on crop allocation, but the program likely had a large effect on many farmers' profit expectations and therefore on decisionmaking for the 1991/92 crop.

Wheat planted area, in particular, has received considerable attention, since wheat accounts for about 50 percent of acreage planted in the Prairie Provinces. Using estimates for 1991/92 prices and yields for crops in the Prairie Provinces, for example, a comparison of GRIP net returns and average market net returns shows that gains from the GRIP program on average would be highest for wheat, followed by barley and canola.

According to Agriculture Canada, preliminary estimates show that all wheat area is 1 percent above 1990, with spring wheat area up 3 percent. In addition to favorable weather this spring, farmers now have a safety net that offers more certainty than in the past, which likely affected planting decisions. If farmers enrolled in GRIP suffer poor yields and their revenue trigger is reached, they have the income support of the GRIP program.

Overall, farmers in the Prairie Provinces have increased area planted to wheat and canola, and have reduced area planted to oats, barley, and summer fallow. Canola area is up 24 percent from 1990, while barley area is down slightly and oats area is 87 percent of 1990's level. Oats plantings in particular appear relatively unattractive in a comparison of GRIP net returns among crops.

Changes in summer fallow area—which registered a 5-percent drop—may reflect GRIP provisions. A farmer participating in GRIP can expand planted area by up to 10 percent from year to year. Farmers incur little risk—and a potential gain—by bringing fallow land into production. If the crop fails or the revenue trigger is reached, the farmer receives a GRIP payment, at a level considerably higher than expected market prices.

GRIP Builds In "Moral Hazard" Offsets

Besides planted area, the effects of GRIP on yield are an important variable affecting production. Under certain circumstances, farmers might consider reducing their input levels with the GRIP program in place. For example, a farmer might sign up for GRIP with the expectation of reducing input use (and consequently lowering yield), triggering a GRIP payment and bringing a greater return than sales of the (higher yielding) crop in the market.

Special Articles

Wheat Producers Expect to Gain the Most from GRIP

	Red spring wheat	Durum wheat	Barley	Canola	Oats
Can\$ per acre					
Net returns from GRIP in 1991/92:¹					
Alberta	91.13	86.52	77.68	107.31	61.29
Saskatchewan	67.79	64.53	59.67	103.54	41.86
Manitoba	84.63	84.52	69.50	93.92	45.41
Net returns from market in 1991/92²					
Alberta	50.57	37.12	49.53	99.31	74.68
Saskatchewan	37.09	26.01	37.22	95.42	53.00
Manitoba	45.80	38.15	43.22	86.18	61.44
Gain from GRIP:					
Alberta	40.56	49.40	28.15	8.00	-13.40
Saskatchewan	30.70	38.52	22.45	8.12	-11.14
Manitoba	38.84	46.37	26.28	7.73	-16.03

¹ Target revenue less input costs, revenue, and crop insurance premiums. ² Expected 1991/92 market revenue less input costs and crop insurance premiums.

This situation—known as “moral hazard”—involves changes in a farmer’s management practices that increase the likelihood of collection. Moral hazard is a potential problem in a year when expected market prices are low relative to the historical average. Certain farmers who sign up for GRIP may attempt to maximize net revenue by lowering production costs and triggering a GRIP payment.

In deciding to reduce input use, a producer needs to compare the target revenue (less the reduced production costs and GRIP premium) with the expected market return that would result from “normal” input use, higher production costs, and no GRIP payment. Precautions built into the GRIP program partially help offset the attractiveness of reduced input use and moral hazard:

- **Multiyear signups**—Farmers who sign up for GRIP must do so for a multiyear period (4 years in Saskatchewan and Alberta, 5 years in Manitoba). Farmers may leave GRIP, but must give at least 2 years’ notice. As a result, farmers cannot simply enroll in a year when market prices are expected to be low.
- **Coverage effects**—Future coverage is affected if a farmer signs up for GRIP, reduces input use, and realizes a loss. Low yields in any year contribute to lower coverage in future years because payment yields for GRIP are calculated as a 15-year moving average of historical yields.

In general, producers would be most likely to reduce input use if market conditions favored GRIP payment collection, as described above, or if the farmer planned on leaving the GRIP program in the near future. For most producers, however, moral hazard and reduced input use will not be a main reason for GRIP signup. Most farmers see the program as a long-run risk management plan to ensure against crop failure or very low market prices.

The Prairie Provinces received an unusually high level of rainfall during April through June. However, hotter conditions in July and August and hail damage have caused crop conditions to deteriorate. Further information on input use and yields will not be available until closer to harvest, which begins in late August and early September. At this point, the outlook for the 1991/92 crop could be characterized as average.

Clearly, GRIP’s effects on Canada’s crop production depend not only on land use allocation, but on input use and yield. *[Mark Simone (202) 219-0610 and Joy Harwood (202) 219-0840] AO*

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Statistical Indicators

Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1989	1990	1991				1992		
	Annual	Annual	I	II	III F	IV F	Annual F	I F	
Prices received by farmers (1977=100)	147	150	146	152	140	139	144	140	
Livestock & products	160	170	167	165	161	161	164	158	
Crops	134	128	124	138	117	117	124	121	
Prices paid by farmers, (1977=100)									
Production items	185	171	173	175	173	—	171	—	
Commodities & services, interest, taxes, & wages	178	184	188	190	189	—	187	—	
Cash receipts (\$ bil.) 1/	159	167	158	169	173	166	164-169	—	
Livestock (\$ bil.)	84	89	85	85	89	93	86-90	—	
Crops (\$ bil.)	75	78	73	83	85	72	76-80	—	
Market basket (1982-84=100)									
Retail cost	125	134	137	139	—	—	—	—	
Farm value	107	114	109	109	—	—	—	—	
Spread	134	144	153	154	—	—	—	—	
Farm value/retail cost (%)	30	30	29	28	—	—	—	—	
Retail prices (1982-84=100)									
Food	125	132	136	137	—	—	135-139	—	
At home	124	132	136	137	—	—	135-137	—	
Away from home	127	133	136	137	—	—	138-141	—	
Agricultural exports (\$ bil.) 2/	39.7	40.1	11.3	8.8	8.4	—	37.0	—	
Agricultural imports (\$ bil.) 2/	21.5	22.6	5.8	5.6	5.3	—	22.5	—	
Commercial production									
Red meat (mil. lb.)	39,418	38,608	9,464	9,835	10,062	10,348	39,507	9,795	
Poultry (mil. lb.)	22,039	23,635	5,837	6,268	6,275	6,370	24,750	8,100	
Eggs (mil. doz.)	5,598	5,660	1,418	1,417	1,425	1,455	5,714	1,430	
Milk (bil. lb.)	144.3	148.3	37.5	38.7	36.5	36.1	148.6	37.9	
Consumption, per capita *									
Red meat and poultry (lb.)	210.4	210.8	50.9	53.2	54.7	57.0	215.8	—	
Corn beginning stocks (mil. bu.) 3/	4,259.1	1,930.4	1,344.5	6,940.3	4,789.0	2,991.9	1,344.5	1,530.0	
Corn use (mil. bu.) 3/	7,260.1	8,113.4	2,338.1	2,151.6	1,798.3	1,461.9	7,750.0	—	
Prices 4/									
Choice steers—Neb. Direct **	73.86	78.56	80.06	77.92	68-72	73-79	75-77	74-80	
Barrows & gilts—7 mkt. (\$/cwt.)	44.03	54.45	61.50	53.34	49-53	43-49	49-51	41-47	
Broilers—12-city (cts./lb.)	59.0	54.8	51.2	52.2	50-54	44-50	50-52	46-52	
Eggs—NY gr. A large (cts./doz.)	81.9	82.2	85.9	70.2	75-79	77-83	77-79	75-89	
Milk—all at plant (\$/cwt.)	13.57	13.68	11.80	11.37	11.80-	12.40-	11.80-	11.25-	
Wheat—KC HRW ordinary (\$/bu.)	4.36	3.44	2.81	3.00	—	12.40	13.40	12.20	
Corn—Chicago (\$/bu.)	2.55	2.51	2.45	2.51	—	—	—	—	
Soybeans—Chicago (\$/bu.)	6.70	5.93	5.70	5.73	—	—	—	—	
Cotton—Avg. spot 41-34 (cts./lb.)	63.7	71.3	75.4	81.0	—	—	—	—	
	1983	1984	1985	1986	1987	1988	1989	1990	1991 F
Gross cash income (\$ bil.)	150.8	155.5	157.2	152.0	164.3	170.4	177.5	183	179-184
Gross cash expenses (\$ bil.)	111.0	119.0	109.3	105.2	108.2	112.3	122.8	125	124-129
Net cash income (\$ bil.)	39.5	36.6	47.9	46.7	56.1	58.1	54.6	58	52-57
Net farm income (\$ bil.)	15.3	26.3	31.0	31.0	41.3	41.8	46.7	47	40-46
Farm real estate values &									
Nominal (\$ per acre)	788	801	713	640	599	632	661	668	682
Real (1982 \$)	788	771	682	577	526	538	545	529	519

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Sept.-Nov. first quarter; Dec.-Feb. second quarter; Mar.-May third quarter; Jun.-Aug. fourth quarter. Sept.-Aug. annual. Use includes exports & domestic disappearance. 4/ Simple averages. Jan.-Dec. 5/ 1990-91 values as of January 1. 1986-89 values as of February 1. 1982-85 values as of April 1. F = forecast. — = not available.

* The pork carcass to retail conversion factor has been revised. ** Omaha Choice steer price has been replaced by the Nebraska Direct, 1,100-1,300 lb. Choice steer price.

U.S. & Foreign Economic Data

Table 2.—U.S. Gross National Product & Related Data

	Annual			1990			1991	
	1988	1989	1990	II	III	IV	I	II P
	\$ billion (quarterly data seasonally adjusted at annual rates)							
Gross national product	4,873.7	5,200.8	5,465.1	5,443.3	5,514.6	5,527.3	5,557.7	5,620.6
Personal consumption expenditures	3,238.2	3,460.1	3,667.3	3,622.7	3,693.4	3,724.9	3,742.8	3,798.6
Durable goods	457.5	474.6	480.3	478.4	482.3	468.6	455.3	462.2
Nondurable goods	1,060.0	1,130.0	1,183.7	1,179.0	1,205.0	1,216.0	1,212.7	1,218.0
Clothing & shoes	191.1	204.8	213.2	212.6	215.8	211.5	213.3	218.8
Food & beverages	562.8	595.3	624.7	623.3	629.6	629.4	636.7	639.7
Services	1,720.7	1,845.6	1,963.3	1,965.3	2,006.2	2,040.4	2,074.8	2,118.5
Gross private domestic investment	747.1	771.2	741.0	759.0	769.7	698.3	660.0	663.1
Fixed investment	720.8	742.9	746.1	745.6	760.7	729.2	694.1	691.3
Change in business inventories	26.2	28.3	-6.0	13.4	9.0	-30.8	-34.2	-28.3
Net exports of goods & services	-74.1	-46.1	-31.2	-24.9	-41.3	-28.8	13.5	9.4
Government purchases of goods & services	982.6	1,026.6	1,066.1	1,066.4	1,102.6	1,132.9	1,141.6	1,149.4
1982 \$ billion (quarterly data seasonally adjusted at annual rates)								
Gross national product	4,016.9	4,117.7	4,167.3	4,155.1	4,170.0	4,163.4	4,124.1	4,128.4
Personal consumption expenditures	2,906.5	2,656.8	2,681.6	2,678.6	2,696.8	2,673.6	2,663.7	2,687.2
Durable goods	418.2	428.0	427.4	426.6	429.6	415.6	402.9	408.0
Nondurable goods	809.4	919.9	911.1	911.2	916.4	901.2	897.1	899.3
Clothing & shoes	165.0	172.7	172.6	171.3	174.4	170.6	167.0	171.4
Food & beverages	462.2	462.9	457.4	459.3	459.4	453.6	453.5	451.1
Services	1,278.9	1,309.0	1,343.1	1,340.6	1,350.6	1,356.7	1,363.7	1,379.6
Gross private domestic investment	705.7	716.9	688.7	700.7	697.0	656.3	623.7	626.9
Fixed investment	682.1	693.1	692.3	691.2	692.3	682.7	648.6	647.1
Change in business inventories	23.6	23.8	-2.6	0.5	4.7	-26.4	-25.0	-21.2
Net exports of goods & services	-75.9	-84.1	-33.6	-44.6	-46.6	-8.8	7.1	-18.6
Government purchases of goods & services	780.5	796.1	820.8	820.2	822.7	832.3	829.6	833.9
GNP implicit price deflator (% change)	3.3	4.1	4.1	4.7	3.7	2.8	5.2	3.9
Disposable personal income (\$ bil.)	3,479.2	3,725.5	3,946.1	3,926.7	3,960.1	4,001.9	4,021.3	4,058.2
Disposable per. income (1982 \$ bil.)	2,800.6	2,869.0	2,893.5	2,902.6	2,898.0	2,872.4	2,861.9	2,870.8
Per capita disposable per. income (\$)	14,123	14,973	15,695	15,639	15,765	15,849	15,887	16,006
Per capita dis. per. income (1982 \$)	11,388	11,531	11,609	11,564	11,511	11,370	11,307	11,323
U.S. population, total, incl. military abroad (mil.)	246.4	248.6	251.4	251.0	251.6	252.6	252.9	253.3
Civilian population (mil.)	244.1	246.6	249.2	248.9	249.6	250.4	250.8	251.1
	Annual			1990			1991	
	1988	1989	1990	June	Mar	Apr	May	June P
Monthly data seasonally adjusted								
Industrial production (1987=100)	105.4	108.1	109.2	110.1	105.0	105.5	106.2	106.9
Leading economic indicators (1982=100)	142.7	144.9	144.0	146.2	141.4	141.8	142.9	143.6
Civilian employment (mil. persons)	115.0	117.3	117.9	118.2	116.7	117.4	116.6	116.9
Civilian unemployment rate (%)	5.4	5.2	5.4	5.3	6.6	6.6	6.9	7.0
Personal income (\$ bil. annual rate)	4,070.6	4,384.3	4,846.5	4,840.7	4,760.4	4,755.1	4,780.0	4,802.6
Money stock—M2 (daily avg.) (\$ bil.) 1/	3,069.8	3,223.1	3,327.6	3,290.6	3,374.9	3,382.6	3,394.9	3,398.6
Three-month Treasury bill rate (%)	6.00	8.12	7.51	7.74	5.91	6.67	5.61	5.00
AAA corporate bond yield (Moody's) (%)	8.71	9.26	9.32	9.26	8.93	8.86	8.86	9.01
Housing starts (1,000) 2/	1,488	1,376	1,193	1,187	907	977	989	1,040
Auto sales at retail, total (mil.)	10.6	9.9	9.5	9.8	8.7	7.0	8.4	9.0
Business inventory/sales ratio	1.49	1.51	1.51	1.49	1.57	1.54	1.51	—
Sales of all retail stores (\$ bil.)	137.6	145.1	160.6	160.3	151.5	151.0	152.2 P	151.9
Nondurable goods stores (\$ bil.)	85.3	90.8	96.0	96.0	97.7	97.5	98.3 P	98.0
Food stores (\$ bil.)	27.2	28.8	30.2	30.2	30.9	30.7	30.9 P	30.9
Eating & drinking places (\$ bil.)	13.9	14.6	15.2	16.3	16.5	16.6	16.7 P	16.6
Apparel & accessory stores (\$ bil.)	7.1	7.6	7.9	8.1	7.9	8.1	8.2 P	8.1
	Annual			1990			1991	
	1988	1989	1990	July	Apr	May	June	July
Foreign exchange value of the dollar								
Japanese yen per U.S. dollar	128.2	138.1	145.0	149.0	137.1	138.1	139.8	137.8
German marks per U.S. dollar	1.757	1.881	1.817	1.840	1.703	1.720	1.780	1.780

1/ Annual data as of December of the year listed. 2/ Private, including farm. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 3.—Foreign Economic Growth, Inflation, & Export Earnings

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F	1992 F	Average 1981-90
Annual percent change												
World, less U.S.												
Real GDP	1.1	2.2	3.8	3.5	3.2	3.4	4.5	3.5	2.4	1.6	2.7	2.9
Consumer prices	13.5	12.3	12.9	13.1	10.3	13.3	21.8	42.7	43.2	45.1	30.2	19.7
Merch. exports	-7.0	-1.5	5.4	1.8	11.7	18.0	12.6	7.3	14.9	8.0	8.9	6.1
Developed less U.S.												
Real GDP	1.0	2.1	3.7	3.4	2.7	3.2	4.5	3.7	3.3	2.0	3.1	2.9
Consumer prices	7.5	5.0	4.7	4.2	2.4	3.0	3.3	4.4	4.9	4.6	3.9	6.0
Merch. exports	-4.4	-0.5	0.3	4.8	19.4	17.8	12.2	6.0	17.1	10.3	8.3	7.5
Developing												
Real GDP	1.9	1.3	4.5	4.5	2.8	4.1	4.2	3.4	2.6	2.9	4.7	3.2
Consumer prices	25.3	32.0	38.3	38.6	30.2	41.0	70.2	105.0	117.7	40.0	26.4	52.8
Merch. exports	-13.3	-3.3	3.8	-3.2	-3.4	19.7	14.3	10.2	9.2	7.0	11.5	3.2
Asia												
Real GDP	6.7	8.1	8.4	8.9	8.9	8.1	9.0	5.5	5.3	6.0	5.2	7.0
Consumer prices	8.4	8.6	8.1	8.0	8.7	9.5	14.3	11.7	7.9	9.1	9.2	8.7
Merch. exports	-0.5	4.6	14.6	-0.9	8.8	30.1	23.2	11.5	11.6	7.5	9.5	11.0
Latin America												
Real GDP	-1.5	-2.8	3.0	3.4	4.7	2.4	0.2	1.5	-1.0	1.0	3.3	1.0
Consumer prices	67.1	108.7	133.5	146.1	87.8	130.9	286.4	533.1	768.0	122.9	65.5	232.1
Merch. exports	-10.6	-0.2	6.3	-5.5	-17.9	13.6	14.1	12.3	9.2	3.8	4.7	2.7
Africa												
Real GDP	1.1	-1.1	0.7	4.0	1.7	1.3	2.9	3.3	1.9	2.0	2.9	1.4
Consumer prices	13.3	17.8	20.0	13.1	14.7	14.7	18.8	19.5	15.2	17.6	14.6	16.9
Merch. exports	-27.9	15.2	-1.0	-2.5	-17.1	14.2	-2.3	2.8	20.7	2.9	4.0	-1.6
Middle East												
Real GDP	2.9	1.1	0.0	1.7	-0.7	0.1	4.7	3.2	-1.5	-3.3	8.5	1.6
Consumer prices	11.4	9.9	11.7	9.4	10.0	17.7	16.8	14.2	13.6	13.3	13.2	12.8
Merch. exports	-22.0	-23.0	-12.1	-7.9	-20.4	13.1	2.1	19.0	13.0	-7.1	13.2	-4.3
Central Europe, & USSR												
Real GDP	2.4	2.7	1.9	0.6	3.3	1.0	1.6	1.0	-7.1	-14.8	-2.4	0.8
Consumer prices	15.4	8.4	5.8	8.3	10.1	12.4	20.6	93.8	83.1	221.2	154.9	28.3
Merch. exports	8.1	3.8	1.0	-1.9	5.7	10.1	5.2	-0.1	-5.3	-10.9	3.1	3.0

F = forecast.

Information contact: Alberto Jerrado, (202) 219-0717.

Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			1990				1991			
	1986	1989	1990	July	Feb	Mar	Apr	May	June R	July P	
1977 = 100											
Prices received											
All farm products	138	147	150	151	145	149	148	152	155	151	151
All crops	128	134	128	129	122	128	131	138	146	137	137
Food grains	138	156	123	116	103	107	110	112	108	104	104
Feed grains & hay	120	128	123	131	118	122	124	122	115	111	111
Feed grains	117	123	118	128	114	117	119	117	113	109	109
Cotton	95	98	107	106	112	113	117	114	111	107	107
Tobacco	132	145	149	144	154	153	153	153	153	153	153
Oil-bearing crops	108	102	92	93	93	94	94	93	92	87	87
Fruit, all	185	192	192	198	197	213	213	235	398	364	364
Fruit, market 1/	197	203	202	206	207	228	228	253	449	410	410
Commercial vegetables	140	152	154	134	142	166	169	214	172	148	148
Fresh market	138	144	144	123	131	180	183	224	163	136	136
Potatoes & dry beans	124	188	191	245	133	136	164	222	188	188	188
Live stock & products	150	160	170	172	166	189	166	165	163	163	163
Meat animals	166	174	193	196	186	199	198	190	192	191	191
Dairy products	128	140	141	144	121	117	116	117	117	119	119
Poultry & eggs	118	137	131	128	122	138	122	119	120	127	127
Prices paid											
Commodities & services											
Interest, taxes, & wage rates	170	178	184	184	—	—	190	—	—	189	189
Production items	157	165	171	170	—	—	175	—	—	173	173
Feed	128	136	128	130	—	—	125	—	—	119	119
Feeder livestock	182	184	213	214	—	—	223	—	—	214	214
Seed	150	165	165	163	—	—	163	—	—	163	163
Fertilizer	130	137	131	130	—	—	138	—	—	136	136
Agricultural chemicals	127	138	139	141	—	—	153	—	—	153	153
Fuels & energy	167	180	204	187	—	—	198	—	—	196	196
Farm & motor supplies	145	150	154	154	—	—	157	—	—	157	157
Autos & trucks	215	223	231	233	—	—	247	—	—	248	248
Tractors & self-propelled machinery	181	193	202	201	—	—	210	—	—	210	210
Other machinery	107	208	216	217	—	—	227	—	—	227	227
Building & fencing	138	141	144	143	—	—	144	—	—	148	148
Farm services & cash rent	151	161	168	166	—	—	172	—	—	172	172
Int. payable per acre on farm real estate debt	182	178	174	174	—	—	173	—	—	173	173
Taxes payable per acre on farm real estate	147	152	157	157	—	—	162	—	—	162	162
Wage rates (seasonally adjusted)	177	185	191	192	—	—	202	—	—	202	202
Production items, interest, taxes, & wage rates	160	167	172	171	—	—	178	—	—	174	174
Ratio, prices received to prices paid (%) 2/	81	83	82	82	78	79	78	80	82	80	80
Prices received (1910-14=100)	832	674	684	692	661	681	679	694	708	688	688
Prices paid, etc. (parity index) (1910-14=100)	1,167	1,220	1,265	1,255	—	—	1,305	—	—	1,299	1,299
Parity ratio (1910-14=100) (%) 2/	54	55	54	55	—	—	52	—	—	53	53

1/ Fresh market for noncitrus; fresh market & processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities & services, interest, taxes, & wage rates. Ratio uses the most recent prices paid index. Prices paid data are quarterly & will be published in January, April, July, & October. R = revised. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 5.—Prices Received by Farmers, U.S. Average

CROPS	Annual 1/			1990			1991				
	1988	1989	1990	July	Feb	Mar	Apr	May	June R	July P	
All wheat (\$/bu.)	3.72	3.72	2.81	2.79	2.43	2.53	2.60	2.64	2.55	2.47	
Rice, rough (\$/cwt)	6.83	7.35	6.73	7.05	6.72	7.08	7.46	7.42	7.40	6.93	
Corn (\$/bu.)	2.54	2.36	2.30	2.62	2.32	2.39	2.42	2.38	2.31	2.23	
Sorghum (\$/cwt)	4.05	3.79	3.75	4.44	3.87	3.93	4.05	4.11	3.89	3.79	
All hay, baled (\$/ton)	85.20	86.00	86.00	83.60	80.40	84.50	88.60	84.20	71.60	70.60	
Soybeans (\$/bu.)	7.42	5.70	5.75	5.97	5.65	5.78	5.77	5.67	5.55	5.20	
Cotton, upland (cts./lb.)	55.6	66.2	67.8	63.9	67.9	68.5	70.8	68.9	67.2	64.9	
Potatoes (\$/cwt)	8.02	7.36	6.15	9.97	5.38	5.54	6.83	9.70	8.18	8.11	
Lettuce (\$/cwt) 2/	14.70	12.80	11.50	12.40	6.80	10.60	8.93	23.10	9.46	6.71	
Tomatoes fresh (\$/cwt) 2/	27.10	33.10	27.40	28.80	31.60	44.00	49.30	54.40	56.40	35.30	
Onions (\$/cwt)	9.75	11.40	10.50	9.49	10.70	13.00	20.10	22.60	14.60	18.00	
Dry edible beans (\$/cwt)	29.90	28.50	18.50	33.20	18.20	18.90	19.60	20.00	17.80	18.90	
Apples for fresh use (cts./lb.)	17.4	13.9	20.9	20.3	20.3	20.2	19.9	22.5	24.2	24.8	
Pears for fresh use (\$/ton)	358.00	336.00	349.00	410.00	358.00	395.00	390.00	431.00	754.00	—	
Oranges, all uses (\$/box) 3/	7.18	7.08	5.99	6.00	5.98	7.41	7.37	7.95	21.35	19.48	
Grapefruit, all uses (\$/box) 3/	5.43	4.45	6.21	5.80	4.50	5.43	5.10	4.91	5.44	4.82	
LIVESTOCK											
Beef cattle (\$/cwt)	66.80	69.67	74.79	73.60	77.00	78.50	78.00	75.90	73.60	73.30	
Calves (\$/cwt)	89.85	91.84	96.51	95.90	104.00	107.00	109.00	107.00	106.00	103.00	
Hogs (\$/cwt)	42.54	43.24	53.99	60.80	52.10	51.40	50.80	54.10	54.70	53.90	
Lambs (\$/cwt)	69.50	67.33	58.01	54.40	45.80	51.10	54.60	57.60	55.30	56.10	
All milk, sold to plants (\$/cwt)	12.26	13.56	13.78	14.00	11.70	11.40	11.30	11.40	11.40	11.60	
Milk, manuf. grade (\$/cwt)	11.15	12.38	12.33	13.10	10.20	10.10	10.10	10.20	10.40	10.70	
Broilers (cts./lb.)	34.0	36.1	32.4	36.3	29.9	30.6	30.4	31.3	31.4	32.6	
Eggs (cts./doz.) 4/	53.2	70.0	70.4	57.3	67.7	80.5	65.1	59.5	59.3	65.0	
Turkeys (cts./lb.)	36.9	40.0	38.4	39.1	34.4	37.6	38.7	38.9	39.7	40.0	
Wool (cts./lb.) 5/	138.0	124.0	76.8	78.0	42.1	47.9	58.4	67.4	71.8	56.4	

1/ Season average price by crop year for crops. Calendar year average of monthly prices for livestock. 2/ Excludes Hawaii. 3/ Equivalent on-tree returns.

4/ Average of all eggs sold by producers including hatching eggs & eggs sold at retail. 5/ Average local market price, excluding incentive payments.

R = revised. P = preliminary. — not available.

Information contact: Ann Duncan (202) 219-0313.

Producer & Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual			1990			1991				
	1990	June	Nov	Dec	Jan	Feb	Mar	Apr	May	June	
1982-84=100											
Consumer Price Index, all items	130.7	129.9	133.8	133.8	134.6	134.8	135.0	135.2	135.6	136.0	
Consumer Price Index, less food	130.3	129.4	133.7	133.7	134.3	134.8	134.8	134.9	135.4	135.7	
All food	132.4	132.0	134.0	134.2	135.8	135.5	135.8	136.7	136.8	137.2	
Food away from home	133.4	133.4	135.4	135.7	135.8	136.2	136.5	137.1	137.5	137.9	
Food at home	132.3	131.7	133.8	133.8	136.4	135.7	136.0	137.0	136.9	137.4	
Meats 1/	128.5	129.8	133.1	133.6	133.5	132.8	133.1	132.7	133.4	133.5	
Beef & veal	128.8	129.0	131.9	133.0	132.9	132.6	132.9	133.4	134.1	133.2	
Pork	129.8	132.9	137.1	136.8	136.5	135.1	135.2	133.3	134.2	138.1	
Poultry	132.5	134.0	130.5	129.7	131.3	132.7	131.9	131.1	132.7	131.5	
Fish	146.7	143.7	147.0	148.5	151.1	148.7	149.6	148.2	147.0	148.7	
Eggs	124.1	112.2	128.5	128.7	139.8	125.4	133.1	124.8	112.4	110.2	
Dairy products 2/	126.5	124.9	128.1	126.7	125.2	125.2	124.9	124.6	124.4	123.9	
Fats & oils 3/	126.3	125.5	128.8	131.0	132.4	133.1	132.5	133.0	132.6	131.6	
Fresh fruit	170.9	173.2	164.8	171.2	190.2	190.6	195.6	202.3	204.8	204.4	
Processed fruit	136.9	140.1	137.0	134.8	134.7	132.2	132.2	132.3	132.1	131.2	
Fresh vegetables	151.1	140.0	149.5	144.0	159.9	152.5	151.1	160.2	167.3	180.5	
Potatoes	162.6	185.8	134.5	133.9	139.6	140.9	139.6	144.4	149.1	165.8	
Processed vegetables	127.5	127.6	127.5	128.1	127.7	128.4	128.2	128.4	128.7	130.0	
Cereals & bakery products	140.0	140.1	141.7	142.4	144.3	144.3	144.3	145.2	145.3	145.7	
Sugar & sweets	124.7	124.5	126.1	128.4	127.3	127.1	128.3	128.2	129.2	129.5	
Beverages, nonalcoholic	113.5	113.3	114.5	113.1	115.7	116.3	114.9	115.5	114.9	113.9	
Apparel											
Apparel, commodities less footwear	122.8	121.8	126.4	123.8	122.0	124.8	127.7	129.1	128.3	125.2	
Footwear	117.4	117.3	119.6	118.4	117.3	118.4	120.8	121.9	121.7	120.2	
Tobacco & smoking products	181.5	180.9	187.2	190.5	195.8	196.7	197.6	199.2	199.6	202.9	
Beverages, alcoholic	129.3	129.3	130.9	130.9	137.3	141.6	142.2	142.6	142.7	143.0	

1/ Beef, veal, lamb, pork, & processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ann Duncan (202) 219-0313.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1990	1991					
	1988	1989	1990	June	Jan	Feb R	Mar	Apr	May	June
	1982 = 100									
Finished goods 1/	108.0	113.6	110.2	117.8	122.3	121.4	120.6	120.0	121.7	121.0
Consumer foods	112.6	118.7	124.4	124.2	124.8	124.6	126.1	125.4	126.2	125.4
Fresh fruit	113.5	113.2	117.3	117.0	127.4	131.8	132.7	129.5	132.4	137.0
Fresh & dried vegetables	105.6	116.7	118.1	99.9	97.0	98.4	97.2	119.7	148.7	135.7
Dried fruit	99.1	103.0	106.7	105.0	111.1	111.4	111.3	111.3	111.3	111.3
Canned fruit & juice	120.2	122.7	126.9	127.5	126.2	127.3	126.9	126.9	127.3	126.8
Frozen fruit & juice	129.8	123.9	138.0	146.3	115.1	115.0	112.2	112.5	112.8	112.7
Fresh veg. excl. potatoes	100.4	103.9	107.8	83.7	89.3	87.3	88.4	112.6	157.0	138.0
Canned veg. & juices	108.3	118.6	116.7	118.1	114.8	114.8	115.4	114.4	114.8	112.7
Frozen vegetables	108.6	115.6	118.5	118.0	118.4	118.5	118.8	118.6	118.0	117.7
Potatoes	113.9	153.6	157.3	147.2	134.0	137.5	134.8	158.4	136.1	146.1
Eggs	88.6	119.6	117.6	100.4	140.0	110.5	131.7	113.2	94.6	96.9
Bakery products	126.4	135.4	140.9	140.7	144.9	145.5	146.1	145.6	145.5	146.3
Meats	99.9	104.8	116.9	120.3	117.3	117.0	117.6	117.4	118.0	117.4
Beef & veal	101.4	106.9	116.0	115.7	118.1	116.7	118.1	118.4	117.5	114.0
Pork	95.0	97.7	119.7	130.1	116.3	117.6	117.3	115.6	118.0	120.8
Processed poultry	111.8	120.4	113.6	116.0	107.8	106.5	108.0	108.7	111.6	111.8
Fish	148.7	142.9	148.6	137.5	157.8	157.1	168.0	162.6	165.1	146.4
Dairy products	102.2	110.6	117.2	118.0	112.3	112.0	111.3	111.6	111.6	112.0
Processed fruits & vegetables	113.8	119.9	124.8	126.5	120.0	120.2	120.0	119.5	119.7	118.8
Shortening & cooking oil	118.8	116.6	123.2	128.7	119.3	119.0	121.6	120.3	117.2	115.0
Soft drinks	114.3	177.7	122.3	121.1	127.2	127.6	127.0	127.1	126.0	128.5
Consumer finished goods less foods	103.1	108.9	115.3	112.9	119.6	118.2	116.7	117.0	118.1	118.6
Beverages, alcoholic	111.8	115.2	117.2	117.5	124.4	124.2	123.8	124.3	123.2	123.3
Apparel	111.7	114.5	117.4	117.5	118.3	118.8	118.7	119.1	119.2	119.5
Footwear	115.1	120.8	125.6	125.5	128.3	127.1	128.4	127.9	128.4	128.8
Tobacco products	171.9	194.8	221.5	224.1	237.4	237.4	237.7	243.3	243.4	249.1
Intermediate materials 2/	107.1	112.0	114.5	113.1	116.4	115.5	114.3	114.0	114.1	114.3
Materials for food manufacturing	106.0	112.7	117.9	121.0	115.4	115.5	116.1	116.3	115.7	115.3
Flour	105.7	114.6	103.6	109.4	91.2	92.6	94.7	96.1	96.2	95.7
Refined sugar 3/	108.9	118.2	122.7	122.8	123.1	123.2	122.5	122.1	121.1	121.0
Crude vegetable oils	116.6	103.1	116.7	127.7	110.7	110.0	112.3	109.2	102.7	101.8
Crude materials 4/	96.0	103.1	108.9	101.2	112.8	104.1	101.6	101.2	102.2	99.5
Foodstuffs & feedstuffs	106.1	111.2	113.1	115.6	107.2	107.3	110.1	109.0	108.8	107.4
Fruits & vegetables 5/	106.5	114.6	117.2	106.9	109.8	111.4	112.2	123.4	140.8	136.0
Grains	87.9	106.4	97.5	110.4	85.9	88.0	94.0	94.1	92.7	90.2
Livestock	103.3	106.1	115.6	117.8	112.8	113.9	117.1	115.8	115.2	112.8
Poultry, live	121.5	128.8	118.8	118.5	110.4	103.1	110.2	107.3	113.9	112.7
Fibers, plant & animal	98.4	107.8	117.8	125.9	115.2	126.3	126.6	134.0	139.2	130.8
Fluid milk	89.4	98.8	101.3	103.1	84.4	84.1	83.7	82.1	82.8	84.8
Oilseeds	134.0	123.8	111.8	112.2	109.6	111.2	111.7	109.7	107.5	108.7
Tobacco, leaf	87.2	93.8	96.0	95.7	100.2	100.2	99.6	99.6	99.8	99.6
Sugar, raw cane	111.9	115.5	119.2	119.3	115.6	113.1	113.4	113.1	112.9	113.3
All commodities	106.9	112.2	116.3	114.3	119.0	117.2	116.1	116.0	116.5	116.3
Industrial commodities	106.3	111.6	115.8	113.2	119.3	117.2	115.6	115.5	116.5	116.3
All foods 6/	111.5	117.8	123.2	123.8	122.7	122.5	123.3	123.7	124.5	123.5
Farm products &										
Processed foods & feeds	110.0	115.4	118.8	118.6	117.0	117.1	118.3	118.2	118.5	117.7
Farm products	104.9	110.9	112.2	113.8	106.9	106.9	109.6	109.4	110.2	108.9
Processed foods & feeds 6/	112.7	117.8	121.9	122.8	122.1	122.3	122.8	122.7	122.7	122.1
Cereal & bakery products	123.0	131.1	134.1	134.7	135.3	136.0	137.2	137.2	137.6	137.8
Sugar & confectionery	114.7	120.1	123.1	123.0	126.3	128.4	127.2	128.9	129.0	128.4
Beverages	114.3	118.4	120.8	120.8	124.3	125.5	125.2	125.4	124.5	124.7

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types & sizes of refined sugar. 4/ Products entering market for the first time that have not been manufactured at that point. 5/ Fresh & dried. 6/ Includes all raw, intermediate, & processed foods (excludes soft drinks, alcoholic beverages, & manufactured animal feeds). P = preliminary. R = revised.

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Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual			1990		1991				
	1988	1989	1990 P	June	Jan	Feb	Mar	Apr	May	June
Market basket 1/										
Retail cost (1982-84=100)	116.5	124.6	133.5	133.0	137.9	137.0	137.2	138.5	138.4	139.2
Farm value (1982-84=100)	100.5	107.1	113.3	113.4	109.3	108.2	108.3	108.2	110.6	109.2
Farm-retail spread (1982-84=100)	125.1	134.1	144.4	143.6	153.3	152.6	152.7	154.7	153.3	155.3
Farm value—retail cost (%)	30.2	30.1	29.7	29.9	27.7	27.7	27.7	27.4	28.0	27.5
Meat products										
Retail cost (1982-84=100)	112.2	116.7	128.5	129.6	133.5	132.8	133.1	132.7	133.4	133.5
Farm value (1982-84=100)	99.5	103.3	116.6	122.4	114.5	116.0	117.0	117.2	117.0	115.3
Farm-retail spread (1982-84=100)	125.2	130.4	140.6	136.9	153.0	150.0	149.7	148.6	150.2	152.2
Farm value—retail cost (%)	44.9	44.8	46.0	47.8	43.4	44.2	44.5	44.7	44.4	43.7
Dairy products										
Retail cost (1982-84=100)	108.4	115.6	126.5	124.9	125.2	125.2	124.9	124.5	124.4	123.9
Farm value (1982-84=100)	90.8	99.1	101.9	100.7	88.1	88.7	85.6	85.0	84.9	85.4
Farm-retail spread (1982-84=100)	124.7	130.8	149.2	147.2	161.2	160.7	161.2	160.9	160.8	160.4
Farm value—retail cost (%)	40.1	41.1	38.6	38.7	33.0	33.2	32.9	32.8	32.7	33.1
Poultry										
Retail cost (1982-84=100)	120.7	132.7	132.5	134.0	131.3	132.7	131.9	131.1	132.7	131.5
Farm value (1982-84=100)	110.2	117.1	107.6	110.9	100.2	97.7	101.1	100.1	103.7	104.3
Farm-retail spread (1982-84=100)	132.8	150.6	161.1	160.6	167.1	173.0	167.3	166.7	166.1	162.8
Farm value—retail cost (%)	48.9	47.2	43.5	44.3	40.8	39.4	41.0	40.9	41.8	42.5
Eggs										
Retail cost (1982-84=100)	93.6	118.5	124.1	112.2	130.8	125.4	133.1	124.8	112.4	110.2
Farm value (1982-84=100)	76.7	107.6	108.0	93.1	126.5	103.3	128.7	96.6	85.4	85.2
Farm-retail spread (1982-84=100)	123.9	138.1	153.2	146.5	163.7	165.2	141.0	175.6	160.9	155.0
Farm value—retail cost (%)	52.7	58.3	55.9	53.3	58.1	52.9	62.1	49.7	48.6	49.7
Cereal & bakery products										
Retail cost (1982-84=100)	122.1	132.4	140.0	140.1	144.3	144.3	144.3	145.2	145.3	145.7
Farm value (1982-84=100)	92.7	101.7	90.5	95.1	79.2	80.3	83.6	84.9	85.4	84.2
Farm-retail spread (1982-84=100)	126.2	136.7	146.0	146.4	153.4	153.2	152.8	153.6	153.7	154.3
Farm value—retail cost (%)	9.3	9.4	7.9	8.3	6.7	6.8	7.1	7.2	7.2	7.1
Fresh fruits										
Retail cost (1982-84=100)	146.4	154.7	174.6	178.3	198.3	196.5	197.4	206.5	207.3	209.7
Farm value (1982-84=100)	116.5	108.5	128.0	126.8	205.5	198.7	165.3	162.3	185.4	216.5
Farm-retail spread (1982-84=100)	158.7	176.0	196.0	202.1	196.0	195.5	212.2	226.9	217.4	206.6
Farm value—retail cost (%)	26.3	22.2	23.2	22.5	32.7	31.9	26.4	24.8	28.2	32.6
Fresh vegetables										
Retail costs (1982-84=100)	129.3	143.1	151.1	140.0	159.0	162.5	161.1	160.2	167.3	180.5
Farm value (1982-84=100)	105.8	123.3	124.2	100.4	112.9	106.7	103.5	131.3	161.8	140.1
Farm-retail spread (1982-84=100)	141.3	153.2	165.0	160.4	184.1	176.0	175.6	188.7	170.1	201.3
Farm value—retail cost (%)	27.8	29.3	27.9	24.3	24.0	23.8	23.2	26.3	32.8	26.3
Processed fruits & vegetables										
Retail cost (1982-84=100)	117.6	125.0	132.7	134.6	131.5	131.0	130.3	130.5	130.5	130.5
Farm value (1982-84=100)	136.8	133.6	147.2	131.8	121.7	122.3	122.0	122.9	122.9	117.4
Farm-retail spread (1982-84=100)	111.7	122.3	128.1	135.6	134.6	133.7	132.6	132.9	132.9	134.6
Farm value—retail costs (%)	27.6	25.4	26.4	23.3	22.0	22.2	22.4	22.4	22.4	21.4
Fats & oils										
Retail cost (1982-84=100)	113.1	121.2	126.3	125.6	132.4	133.1	132.6	133.0	132.6	131.6
Farm value (1982-84=100)	103.0	95.6	107.1	113.8	103.8	103.3	105.8	105.8	100.0	96.4
Farm-retail spread (1982-84=100)	116.8	130.6	133.4	129.8	142.9	144.1	142.3	143.0	144.6	144.6
Farm value—retail cost (%)	24.6	21.2	22.8	24.4	21.1	20.9	21.5	21.4	20.3	19.7
	Annual			1990		1991				
	1988	1989	1990 P	June	Jan	Feb	Mar	Apr	May	June
Beef, Choice										
Retail price 2/ (cte./lb.)	250.3	265.7	281.0	282.1	294.9	292.5	295.4	297.1	296.1	292.4
Wholesale value 3/ (cte.)	169.4	176.8	189.6	187.0	192.6	189.6	193.4	194.1	190.9	186.1
Net farm value 4/ (cte.)	148.3	157.6	168.4	163.8	170.2	171.1	175.6	176.3	170.0	160.9
Farm-retail spread (cte.)	102.0	108.1	112.6	118.3	124.7	121.4	119.9	121.8	126.1	131.5
Wholesale-retail 5/ (cte.)	80.9	88.9	91.4	95.1	102.3	102.9	102.0	103.0	105.2	106.3
Farm-wholesale 6/ (cte.)	21.1	19.2	21.2	23.2	22.4	18.5	17.9	18.8	20.9	25.2
Farm value—retail price (%)	59	59	60	58	58	58	59	59	57	55
Pork										
Retail price 2/ (cte./lb.)	183.4	182.9	212.6	218.1	216.1	215.5	213.9	211.7	213.3	214.6
Wholesale value 3/ (cte.)	101.0	99.2	118.3	125.6	109.7	110.1	110.8	109.7	115.5	116.0
Net farm value 4/ (cte.)	69.4	70.4	87.2	96.9	81.4	83.1	82.7	81.4	87.4	87.7
Farm-retail spread (cte.)	114.0	112.5	125.4	121.2	134.7	132.4	131.2	130.3	125.8	128.9
Wholesale-retail 5/ (cte.)	82.4	83.7	94.3	92.5	106.4	105.4	103.1	102.0	97.8	98.6
Farm-wholesale 6/ (cte.)	31.6	28.8	31.1	28.7	28.3	27.0	28.1	28.3	28.1	28.3
Farm value—retail price (%)	38	38	41	44	38	39	39	38	41	41

1/ Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by BLS. The farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale & may include marketing charges such as grading & packing for some commodities. The farm-retail spread, the difference between the retail price & the farm value, represents charges for assembling, processing, transporting, distributing. 2/ Weighted average price of retail cuts from pork & choice yield grade 3 beef. Prices from BLS. 3/ Value of wholesale (boxed beef) & wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs & other marketing services such as wholesaling, and in-city transportation. 4/ Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of byproducts. 5/ Charges for retailing & other marketing services such as wholesaling, and in-city transportation. P = preliminary.

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Table 9.—Price Indexes of Food Marketing Costs

	Annual			1990				1991	
	1988	1989	1990	I	II	III	IV	I	II P
1967=100*									
Labor—hourly earnings & benefits	370.1	379.5	392.0	388.8	392.0	392.5	398.3	400.9	404.9
Processing	382.0	390.3	404.8	400.7	404.1	404.4	409.7	412.8	416.9
Wholesaling	394.1	409.1	421.5	417.0	419.5	423.2	428.5	432.0	435.7
Retailing	347.7	355.6	368.8	364.3	367.7	367.0	368.4	375.5	379.2
Packaging & containers	350.7	364.6	367.6	367.1	367.3	366.5	369.4	375.0	372.0
Paperboard boxes & containers	308.1	323.7	323.9	326.7	324.1	322.3	322.5	322.4	318.4
Metal cans	442.3	443.2	455.0	450.9	456.3	456.3	456.3	468.1	469.2
Paper bags & related products	372.2	409.2	413.0	411.5	408.9	410.2	421.3	423.1	419.5
Plastic films & bottles	305.7	313.2	307.1	308.5	306.9	303.9	309.2	318.0	311.6
Glass containers	398.9	409.9	427.3	422.2	428.0	428.9	429.8	445.4	445.9
Metal foil	286.9	274.4	258.4	250.0	257.6	281.4	284.7	283.0	257.5
Transportation services	403.5	404.9	411.3	410.9	410.5	408.2	415.7	420.7	423.2
Advertising	384.7	409.1	432.9	425.3	429.8	435.1	441.7	453.5	458.0
Fuel & power	578.2	619.4	671.4	652.6	615.0	688.0	750.1	679.5	636.8
Electric	453.3	468.9	477.7	464.2	470.3	496.0	480.1	490.8	505.3
Petroleum	502.0	592.1	744.8	693.3	582.6	713.4	989.8	739.1	599.5
Natural gas	1,042.1	1,070.9	1,071.0	1,092.3	1,059.0	1,056.8	1,076.2	1,089.8	1,056.0
Communications, water & sewage	241.3	247.3	253.1	251.5	253.0	253.0	255.0	258.4	260.3
Rent	272.6	277.1	273.0	272.2	274.6	274.9	270.3	271.8	271.6
Maintenance & repair	395.9	410.7	428.7	421.1	425.2	428.2	432.4	435.7	441.1
Business services	364.6	388.3	405.8	399.0	403.3	407.5	412.7	421.6	425.6
Supplies	305.6	321.4	321.1	318.7	318.9	320.1	328.6	325.5	319.5
Property taxes & insurance	419.9	439.7	462.2	452.7	456.5	468.3	471.4	474.0	477.4
Interest, short-term	150.3	172.1	155.5	158.0	160.3	153.2	150.3	129.1	118.5
Total marketing cost index	372.4	384.8	397.5	393.4	393.9	397.0	405.5	405.9	405.8

* Indexes measure changes in employee earnings & benefits & in prices of supplies & services used in processing, wholesaling, & retailing U.S. farm foods purchased for at-home consumption. P = preliminary.

Information contact: Denis Dunham (202) 219-0870.

Livestock & Products

Table 10.—U.S. Meat Supply & Use

	Beg. stocks	Produc- tion 1/	Imports	Total supply	Exports	Ending stocks	Consumption		Primary market price 3/
							Total	Per capita 2/	
Million pounds 4/									
Beef							Pounds		
1988	386	23,589	2,380	26,355	681	422	25,252	72.6	71.19
1989	422	23,087	2,179	25,688	1,023	335	24,330	69.3	73.86
1990	335	22,743	2,356	25,434	1,006	397	24,031	67.8	78.56
1991 F	397	22,988	2,280	25,663	1,150	315	24,198	67.6	75-77
Pork							Pounds		
1988	360	15,684	1,136	17,180	195	437	16,548	52.5	43.39
1989	437	15,813	896	17,146	262	313	16,571	52.0	44.03
1990	313	15,354	898	16,565	239	296	16,030	49.8	54.45
1991 F	296	16,021	878	17,195	254	375	16,566	50.9	49-51
Veal 5/							Pounds		
1988	4	396	27	427	10	5	412	1.4	89.85
1989	5	355	0	360	0	4	356	1.2	91.84
1990	4	327	0	331	0	6	325	1.1	90.51
1991 F	6	314	0	320	0	4	316	1.0	102-104
Lamb & mutton							Pounds		
1988	8	335	51	394	1	6	387	1.4	68.26
1989	6	347	63	416	2	8	406	1.5	67.32
1990	8	363	59	430	3	8	419	1.5	55.64
1991 F	8	365	60	433	2	9	422	1.5	52-54
Total red meat							Pounds		
1988	758	40,004	3,594	44,356	887	870	42,599	127.9	—
1989	870	39,602	3,138	43,810	1,287	660	41,663	124.0	—
1990	660	38,787	3,313	42,760	1,248	707	40,805	120.1	—
1991 F	707	39,688	3,218	43,811	1,408	703	41,502	121.0	—
Broilers							Pounds		
1988	25	16,187	0	16,212	765	36	15,410	62.9	56.3
1989	36	17,424	0	17,460	814	38	16,608	67.1	59.0
1990	38	18,660	0	18,698	1,143	26	17,529	70.1	54.8
1991 F	26	19,733	0	19,759	1,105	35	18,820	73.8	50-52
Mature chicken							Pounds		
1988	188	633	0	821	26	157	639	2.6	—
1989	157	568	0	725	24	189	511	2.1	—
1990	189	588	0	777	25	224	528	2.1	—
1991 F	224	553	0	777	25	240	513	2.0	—
Turkeys							Pounds		
1988	266	3,960	0	4,226	51	250	3,926	18.0	61.2
1989	250	4,285	0	4,535	41	236	4,259	17.2	66.7
1990	236	4,734	0	4,970	54	306	4,610	18.4	63.2
1991 F	306	4,817	0	5,123	67	260	4,796	19.0	62-64
Total poultry							Pounds		
1988	479	20,780	0	21,259	842	442	19,975	81.5	—
1989	442	22,278	0	22,720	878	463	21,379	86.4	—
1990	463	23,982	0	24,445	1,222	557	22,666	90.7	—
1991 F	557	25,103	0	25,660	1,196	535	23,929	94.8	—
Red meat & poultry							Pounds		
1988	1,237	60,784	3,594	65,515	1,729	1,312	62,573	209.4	—
1989	1,312	61,880	3,138	66,330	2,165	1,123	63,042	210.4	—
1990	1,123	62,789	3,313	67,205	2,470	1,264	63,471	210.8	—
1991 F	1,264	64,789	3,218	69,271	2,602	1,238	65,431	215.8	—

1/ Total including farm production for red meats & federally inspected plus nonfederally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was 70.5.) 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Medium # 1, Nebraska Direct 1,100-1,300 lb.; pork: barrows & gilts, 7 markets; veal: farm price of calves; lamb & mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-18 lb. young hens. 4/ Carcass weight for red meats & certified ready-to-cook for poultry. 5/ Beginning 1989 veal trade no longer reported separately. F = forecast. — = not available.

Information contacts: Polly Cochran, or Maxine Davis (202) 219-0767.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Pro- duc- tion	Im- ports	Total supply	Ex- ports	Hatch- ing use	Ending stocks	Consumption		
								Total	Per capita	Wholesale price*
								No.	Cts./doz.	
Million dozen										
1986	10.7	5,766.3	13.7	5,790.7	101.6	566.8	10.4	5,111.9	254.9	71.1
1987	10.4	5,868.2	5.8	5,884.2	111.2	599.1	14.4	5,159.5	254.9	61.6
1988	14.4	5,784.2	5.3	5,803.9	141.8	605.9	15.2	5,041.0	248.8	62.1
1989	15.2	5,597.8	25.2	5,638.2	91.6	642.9	10.7	4,893.0	237.3	81.9
1990	10.7	5,659.9	9.1	5,679.8	100.5	675.8	11.5	4,891.7	234.8	82.2
1991 F	11.6	5,714.3	1.7	5,727.7	129.8	707.6	12.0	4,878.3	231.9	75-81

* Cartoned grade A large eggs, New York. F = forecast.

Information contact: Maxine Davis (202) 219-0767.

Table 12.—U.S. Milk Supply & Use

Production	Farm use	Commercial			Total commer- cial supply	CCC net re- moves	Commercial		CCC net removals			
		Farm market- ings	Beg. stock	Im- ports			Ending stocks	Disap- pear- ance	All milk price 1/	Skim solids basis	Total solids basis 2/	
									\$/wt		Billion pounds	
Billion pounds (milkfat basis)												
1984	136.4	2.9	132.4	6.1	2.7	140.2	8.7	4.8	120.7	13.48	12.4	10.9
1985	143.0	2.6	140.8	4.8	2.8	148.2	13.3	4.6	130.4	12.76	17.2	15.6
1986	143.1	2.4	140.7	4.5	2.7	147.9	10.8	4.1	133.0	12.51	14.3	12.9
1987	142.7	2.3	140.6	4.1	2.5	147.1	6.8	4.0	135.7	12.64	9.3	8.3
1988	145.2	2.2	142.9	4.0	2.4	149.9	9.1	4.3	138.5	12.26	6.5	6.9
1989	144.2	2.1	142.2	4.3	2.5	149.0	9.4	4.1	135.5	13.56	0.4	4.0
1990	148.3	2.0	146.3	4.1	2.7	153.1	9.0	5.1	139.0	13.73	1.6	4.6
1991 F	146.8	2.0	146.8	5.1	2.5	154.4	10.2	4.6	139.6	12.00	4.0	8.5

1/ Delivered to plants & dealers; does not reflect deductions. 2/ Arbitrarily weighted average of milkfat basis (40 percent) & skim solids basis (60 percent). F = forecast.

Information contact: Jim Miller (202) 219-0770.

Table 13.—Poultry & Eggs

	Annual				1990		1991			
	1988	1989	1990	June	Jan	Feb	Mar	Apr	May	June
Broilers										
Federally inspected slaughter, certified (mil. lb.)	16,124.4	17,334.2	18,553.9	1,535.7	1,687.8	1,488.1	1,518.4	1,692.0	1,739.1	1,564.5
Wholesale price, 12-city (cts./lb.)	56.3	59.0	54.8	58.4	51.7	50.8	51.4	52.0	52.0	52.7
Price of grower feed (\$/ton)	219	237	218.3	220	213	214	211	209	209	209
Broiler-feed price ratio 1/	3.1	3.0	3.0	3.1	2.9	2.8	2.9	2.9	3.0	3
Stocks beginning of period (mil. lb.)	24.8	35.0	38.3	30.9	26.1	22.7	27.3	30.5	32.8	38.3
Broiler-type chicks hatched (mil.) 2/	5,802.4	5,946.9	6,314.6	542.2	543.9	497.1	567.1	564.0	583.3	566.7
Turkeys										
Federally inspected slaughter, certified (mil. lb.)	3,923.4	4,174.8	4,560.9	369.2	368.7	322.0	330.1	377.1	396.0	368.0
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts./lb.)	61.2	66.7	63.2	62.9	53.5	55.8	59.1	60.3	62.3	62.7
Price of turkey grower feed (\$/ton)	243	251	238.4	242	234	237	235	237	236	234
Turkey-feed price ratio 1/	3.0	3.2	3.2	3.2	2.9	2.9	3.2	3.1	3.3	3.4
Stocks beginning of period (mil. lb.)	268.2	249.7	235.9	405.6	306.4	301.1	339.1	365.9	406.0	451.3
Poults placed in U.S. (mil.)	261.4	290.7	304.9	29.3	25.9	25.3	25.8	28.6	29.8	28.2
Eggs										
Farm production (mil.)	69,410	67,174	67,919	5,526	5,837	5,284	5,889	6,621	6,761	5,620
Average number of layers (mil.)	277	280	270	267	273	274	272	271	271	271
Rate of lay (eggs per layer on farm)	251	250	251.7	20.7	21.3	19.3	21.0	20.7	21.3	20.7
Cartoned price, New York, grade A large (cts./doz.) 3/	62.1	81.0	82.2	73.6	87.5	78.3	91.9	74.9	67.0	68.8
Price of laying feed (\$/ton)	203	209	202	195	198	199	199	195	195	194
Egg-feed price ratio 1/	5.3	6.7	6.9	6.5	8.0	6.8	8.1	6.7	8.1	6.1
Stocks, first of month										
Shell (mil. doz.)	1.29	0.27	0.36	0.63	0.45	0.51	0.27	0.42	0.36	0.45
Frozen (mil. doz.)	13.1	14.9	10.3	13.2	11.2	11.2	10.6	10.7	9.8	10.3
Replacement chicks hatched (mil.)	366	383	399.0	34.5	33.1	34.8	37.0	39.5	38.9	35.5

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 15 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Maxine Davis (202) 219-0767.

Table 14.—Dairy

	Annual			1990				1991			
	1988	1989	1990	June	Jan	Feb	Mar	Apr	May	June	
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	11.03	12.37	12.21	13.28	10.16	10.04	10.02	10.04	10.23	10.58	
Wholesale prices											
Butter, grade A Chl. (cts./lb.)	132.5	127.9	102.1	98.4	97.3	97.3	97.3	97.3	97.2	98.1	
Am. cheese, Wis., assembly pt. (cts./lb.)	123.8	138.8	136.7	149.5	111.4	111.5	111.5	111.7	115.0	121.4	
Nonfat dry milk (cts./lb.) 2/	79.7	105.5	100.6	129.2	85.2	85.1	85.1	85.4	86.1	88.9	
USDA net removals											
Total milk equiv. (mil. lb.) 3/	9,070.1	9,357.0	8,851.2	874.7	1,843.5	1,850.8	1,264.3	1,685.4	1,442.5	570.1	
Butter (mil. lb.)	312.6	413.4	400.3	30.9	77.5	68.1	52.0	70.4	62.4	23.1	
Am. cheese (mil. lb.)	238.1	37.4	21.5	0	15.5	18.0	13.0	15.1	8.2	7.1	
Nonfat dry milk (mil. lb.)	267.5	0	117.8	0	55.4	44.2	42.5	48.4	28.8	4.7	
Milk											
Milk prod. 21 States (mil. lb.)	123,518	122,509	125,714	10,719	10,663	9,948	11,097	10,908	11,228	10,679	
Milk per cow (lb.)	14,291	14,369	14,768	1,282	1,253	1,172	1,311	1,294	1,334	1,269	
Number of milk cows (1,000)	8,643	8,528	8,513	8,495	8,510	8,487	8,404	8,426	8,418	8,413	
U.S. milk production (mil. lb.)	145,152	144,239	148,284	6/ 12,601	6/ 11,750	6/ 13,113	6/ 12,872	6/ 13,252	6/ 12,804		
Stock, beginning											
Total (mil. lb.)	7,473	8,379	9,038	13,071	13,359	14,758	15,730	16,785	18,402	18,942	
Commercial (mil. lb.)	4,598	4,256	4,120	5,412	5,148	5,833	5,802	5,969	6,289	6,212	
Government (mil. lb.)	2,877	4,122	4,918	7,858	8,213	8,025	9,028	10,798	12,113	12,731	
Imports, total (mil. lb.) 3/	2,394	2,499	2,590	258	164	142	155	174	238	—	
Commercial disappearance (mil. lb.)	136,674	135,439	138,947	12,002	10,060	10,111	11,863	10,873	11,950	—	
Butter											
Production (mil. lb.)	1,207.5	1,295.4	1,302.2	96.7	142.1	126.3	131.6	133.7	126.0	98.3	
Stocks, beginning (mil. lb.)	143.2	214.7	256.2	399.6	418.1	470.8	524.8	655.9	816.8	647.5	
Commercial disappearance (mil. lb.)	909.8	878.0	915.2	74.7	37.8	51.6	85.1	58.3	68.0	—	
American cheese											
Production (mil. lb.)	2,758.6	2,674.1	2,890.8	250.6	247.1	222.4	250.0	238.9	247.5	235.2	
Stocks, beginning (mil. lb.)	370.4	293.0	236.2	323.5	347.4	361.5	343.5	361.4	403.6	412.5	
Commercial disappearance (mil. lb.)	2,570.0	2,683.1	2,781.0	240.1	230.3	222.0	206.7	207.4	241.8	—	
Other cheese											
Production (mil. lb.)	2,815.4	2,941.3	3,170.4	272.2	254.8	235.6	271.3	283.8	268.5	270.2	
Stocks, beginning (mil. lb.)	89.7	104.7	93.2	119.5	110.6	113.0	107.5	106.2	106.9	103.8	
Commercial disappearance (mil. lb.)	3,034.5	3,208.9	3,429.8	289.1	268.0	254.7	288.3	282.2	296.5	—	
Nonfat dry milk											
Production (mil. lb.)	979.7	874.7	876.0	87.7	82.6	77.9	87.6	95.1	101.4	78.6	
Stocks, beginning (mil. lb.)	177.2	53.1	49.5	70.8	161.9	188.4	207.1	255.8	287.0	328.8	
Commercial disappearance (mil. lb.)	734.3	873.0	895.0	65.4	35.8	44.4	51.8	51.3	82.7	—	
Frozen dessert											
Production (mil. gal.) 4/	1,248.0	1,214.0	1,162.0	118.0	78.9	82.3	99.3	103.5	114.7	124.9	
	Annual			1990				1991			
	1988	1989	1990	IV	I	II	III	IV	I P	II P	

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area. 3/ Milk equivalent, fat basis. 4/ Hard ice cream, ice milk, & hard sherbet. 5/ Based on average milk price after adjustment for price support deductions. 6/ Estimated. P = preliminary. — = not available.

Information contact: LaVerne T. Williams (202) 219-0770.

Table 15.—Wool

	Annual			1990				1991			
	1988	1989	1990	I	II	III	IV	I	II		
U.S. wool price, (cts./lb.) 1/	438	370	256	289	272	238	227	197	200		
Imported wool price, (cts./lb.) 2/	372	354	287	327	312	281	270	235	199		
U.S. mill consumption, scoured											
Apparel wool (1,000 lb.)	117,069	120,534	120,622	31,511	31,726	26,888	30,497	32,338	—		
Carpet wool (1,000 lb.)	15,633	14,122	12,124	3,911	2,950	3,125	2,138	3,088	—		

1/ Wool price delivered at U.S. mills, clean basis. Graded Territory 64's (20.00-22.04 microns) staple 2-3/4" & up. 2/ Wool price, Charleston, SC warehouse, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. — = not available.

Information contact: John Lawler (202) 219-0840.

Table 16.—Meat Animals

	Annual			1990		1991				
	1988	1989	1990	June	Jan	Feb	Mar	Apr	May	June
Cattle on feed (7 States)										
Number on feed (1,000 head) 1/	8,411	8,045	8,378	7,867	9,137	9,103	8,974	9,056	8,875	8,565
Placed on feed (1,000 head)	20,654	20,834	21,215	1,335	1,716	1,425	1,718	1,402	1,717	1,077
Marketings (1,000 head)	19,918	19,422	19,238	1,819	1,632	1,441	1,499	1,655	1,668	1,701
Other disappearance (1,000 head)	1,202	1,079	1,218	73	119	113	137	128	141	114
Beef steer—corn price ratio,										
Omaha 2/	31.5	30.3	32.8	27.9	35.3	34.3	34.0	32.8	32.7	32.0
Hog—corn price ratio, Omaha 2/	19.6	18.4	23.1	22.4	23.0	22.8	21.8	20.8	22.9	23.8
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, Omaha 1,000-1,100 lb.	69.54	72.52	77.40	75.83	78.95	78.83	80.75	80.77	78.28	74.63
Choice steers, Neb. Direct, 1,100-1,300 lb.	71.19	73.88	78.56	73.68	79.35	79.60	81.23	81.09	78.28	74.39
Boning utility cows, Sioux Falls	47.21	48.98	53.80	55.31	49.41	51.49	52.06	52.13	63.40	54.19
Feeder cattle										
Medium no. 1, Oklahoma City 500-700 lb.	84.72	86.68	92.15	94.74	94.21	95.53	96.38	96.52	97.06	97.30
Slaughter hogs										
Barrows & gilts, 7-markets	43.39	44.03	54.45	60.75	51.00	51.93	51.57	51.01	64.47	54.55
Feeder pigs S. Mo. 40-50 lb. (per head)	38.06	33.63	51.46	47.32	48.50	57.47	63.63	60.97	62.98	42.78
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	68.28	67.32	55.54	53.56	47.63	45.81	54.88	55.50	57.70	55.75
Ewes, Good, San Angelo	38.88	38.58	35.21	32.38	31.94	30.38	34.88	35.50	29.90	33.38
Feeder lambs										
Choice, San Angelo	90.89	79.85	62.95	56.50	50.83	49.06	59.25	58.63	64.98	49.00
Wholesale meat prices, Midwest										
Boxed beef cut-out value	110.50	114.78	123.21	121.53	125.04	123.24	125.45	125.98	123.78	120.61
Canner & cutter cow beef	87.77	94.43	99.98	101.51	95.94	100.50	103.43	101.93	103.31	105.15
Pork loins, 14-18 lb. 3/	97.49	101.00	117.52	125.62	107.67	109.13	110.33	104.81	120.48	123.48
Pork bellies, 12-14 lb.	41.25	34.14	53.80	65.15	64.11	57.20	58.52	57.25	57.50	56.48
Hams, skinned, 14-17 lb.	71.03	69.39	87.70	NQ	73.00	83.17	81.42	75.00	80.00	NQ
All fresh beef retail price 4/	224.81	238.97	254.99	254.05	261.30	261.57	261.39	265.15	265.87	264.50
Commercial slaughter (1,000 head)*										
Cattle	35,079	33,917	33,242	2,838	2,881	2,409	2,510	2,741	2,851	2,707
Steers	17,348	16,539	18,587	1,519	1,418	1,220	1,248	1,439	1,491	1,444
Heifers	10,753	10,408	10,090	914	858	741	741	700	850	812
Cows	8,338	8,316	5,920	448	557	461	472	400	454	400
Bulls & steags	844	657	844	55	50	47	48	52	56	51
Calves	2,506	2,172	1,789	135	154	125	123	109	105	93
Sheep & lambs	5,293	5,485	5,654	440	508	461	565	457	461	406
Hogs	87,795	88,691	85,135	6,321	7,652	8,837	7,218	7,495	7,130	8,206
Commercial production (mil. lb.)										
Beef	23,424	22,974	22,634	1,081	1,068	1,894	1,721	1,872	1,948	1,874
Veal	387	344	318	25	31	26	25	23	23	20
Lamb & mutton	329	341	357	27	33	30	38	29	30	25
Pork	15,623	15,758	15,299	1,142	1,306	2,954	1,301	1,361	1,291	1,140
	Annual			1990				1991		
	1988	1989	1990	I	II	III	IV	I	II	III
Cattle on feed (13 States)										
Number on feed (1,000 head) 1/	10,114	9,688	9,943	9,943	10,083	8,761	9,092	10,077	10,869	9,426
Placed on feed (1,000 head)	24,423	24,469	24,948	6,083	5,086	8,333	7,486	5,692	4,890	—
Marketings (1,000 head)	23,459	22,940	22,561	5,578	5,988	5,741	5,254	5,338	5,869	6,044
Other disappearance (1,000 head) 1/	1,390	1,274	1,303	385	400	261	347	462	464	—
Hogs & Pigs (10 States) 5/										
Inventory (1,000 head) 1/	42,675	43,210	42,200	42,200	40,190	42,630	44,120	42,900	41,990	44,520
Breeding (1,000 head) 1/	5,435	5,335	5,275	5,275	5,245	5,405	5,300	5,257	5,450	5,700
Market (1,000 head) 1/	37,240	37,875	38,925	36,925	34,945	37,225	38,820	37,643	36,540	38,820
Farrowings (1,000 head)	9,370	9,203	8,955	2,028	2,458	2,236	2,238	2,129	2,577	2,413
Pig crop (1,000 head)	72,268	71,807	70,549	15,870	19,578	17,684	17,459	16,770	20,555	—

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Prior to 1984, 8-14 lb.; 1984 & 1985, 14-17 lb; beginning 1986, 14-18 lb. 4/ New series estimating the composite price of all beef grades & ground beef sold by retail stores. This new series is in addition to, but does not replace, the series for the retail price of Choice beef that appears in table 8. 5/ Quarters are Dec. of preceding year—Feb. (I), Mar.—May (II), June—Aug. (III), & Sept.—Nov. (IV). 6/ Intentions.

*Classes estimated. May not add to NASS totals due to rounding. — = not available. NQ = no quotation.

Information contact: Polly Cochran (202) 219-0787.

Crops & Products

Table 17.—Supply & Utilization^{1,2}

	Area			Yield	Production	Total supply ⁴	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price ⁵ \$/bu.
	Set aside ³	Planted	Harvested									
	Mil. acres	Bu./acre	Mil. bu.									
Wheat												
1986/87	21.0	72.0	50.7	34.4	2,091	4,017	401	796	999	2,196	1,821	2.42
1987/88	23.9	65.8	55.9	37.7	2,108	3,945	280	806	1,598	2,684	1,281	2.57
1988/89	22.6	65.6	63.2	34.1	1,812	3,996	146	829	1,419	2,394	702	3.72
1989/90 [*]	9.8	78.6	62.2	32.7	2,037	2,762	139	853	1,233	2,226	536	3.72
1990/91 [*]	7.5	77.3	69.4	39.5	2,739	3,311	492	886	1,068	2,446	868	2.61
1991/92 [*]	16.2	70.0	68.1	35.0	2,033	2,939	350	916	1,100	2,365	574	2.00-3.00
Rice												
1986/87	1.48	2.38	2.38	6,651	133.4	213.3	—	6/ 77.7	84.2	161.8	61.4	3.76
1987/88	1.57	2.38	2.33	6,655	129.6	184.0	—	6/ 80.4	72.2	152.8	31.4	7.27
1988/89	1.09	2.93	2.90	6,614	159.9	195.0	—	6/ 82.3	85.9	168.2	26.7	8.83
1989/90 [*]	1.18	2.73	2.69	6,749	154.5	185.4	—	6/ 82.4	76.8	150.2	26.3	7.35
1990/91 [*]	1.02	2.89	2.81	5,507	154.9	186.0	—	6/ 88.8	71.0	159.8	26.2	6.50-7.00
1991/92 [*]	0.58	2.87	2.83	6,644	157.0	188.7	—	6/ 93.0	70.0	163.0	25.7	8.00-8.00
Corn												
1986/87	14.3	78.8	68.8	119.4	8,226	12,267	4,701	1,192	1,492	7,385	4,882	1.50
1987/88	23.1	68.2	59.6	119.8	7,131	12,016	4,812	1,229	1,716	7,757	4,259	1.94
1988/89	20.5	87.7	58.3	84.8	4,929	9,191	3,861	1,251	2,028	7,280	1,930	2.54
1989/90 [*]	10.8	72.2	64.7	116.3	7,525	9,458	4,455	1,290	2,369	8,113	1,344	2.38
1990/91 [*]	10.7	74.2	67.0	118.5	7,933	9,280	4,700	1,325	1,726	7,750	1,530	2.30
1991/92 [*]	7.3	75.9	68.8	107.8	7,418	8,950	4,725	1,350	1,650	7,725	1,225	2.30-2.70
Sorghum												
1986/87	2.0	15.3	13.9	67.7	939	1,480	638	12	198	748	743	1.37
1987/88	4.1	11.8	10.5	69.4	731	1,474	555	25	232	812	663	1.70
1988/89	3.9	10.3	9.0	63.8	577	1,239	466	22	310	800	440	2.27
1989/90 [*]	3.3	12.6	11.1	65.4	615	1,055	517	15	304	835	220	2.10
1990/91 [*]	3.3	10.5	6.1	62.0	571	791	400	14	220	634	157	2.10
1991/92 [*]	2.3	11.0	9.7	67.9	565	722	400	15	190	605	117	2.15-2.55
Barley												
1986/87	2.0	13.0	12.0	50.8	608	942	298	174	134	808	336	1.61
1987/88	2.9	10.9	10.0	52.4	521	868	253	174	121	548	321	1.81
1988/89	2.8	9.8	7.8	38.0	290	622	166	180	79	425	196	2.80
1989/90 [*]	2.3	9.1	6.3	48.6	404	614	190	179	84	453	161	2.42
1990/91 [*]	2.9	8.2	7.5	55.8	419	595	195	184	80	459	136	2.14
1991/92 [*]	2.1	8.0	8.4	55.8	470	621	215	175	85	475	146	1.90-2.30
Oats												
1986/87	0.6	14.7	8.8	56.3	385	601	385	83	1	468	133	1.21
1987/88	0.8	17.9	8.9	54.3	374	552	356	81	1	440	112	1.56
1988/89	0.3	13.0	5.8	39.3	218	393	194	100	1	294	98	2.61
1989/90 [*]	0.4	12.1	6.9	54.3	374	538	265	115	1	381	157	1.49
1990/91 [*]	0.2	10.4	5.9	60.1	357	585	293	120	1	414	171	1.14
1991/92 [*]	0.5	8.6	6.0	52.2	280	496	260	125	1	388	110	1.10-1.40
Soybeans												
1986/87	0	80.4	58.3	33.3	1,943	2,478	7/ 108	1,179	757	2,042	436	4.78
1987/88	0	58.2	57.2	33.9	1,938	2,375	7/ 97	1,174	802	2,073	302	5.88
1988/89	0	58.8	57.4	27.0	1,549	1,855	7/ 88	1,058	527	1,673	182	7.42
1989/90 [*]	0	60.8	59.6	32.3	1,924	2,109	7/ 101	1,146	623	1,870	239	5.69
1990/91 [*]	0	57.8	56.5	34.0	1,922	2,183	7/ 98	1,180	560	1,838	325	5.75
1991/92 [*]	0	59.8	58.7	31.8	1,869	2,198	7/ 94	1,195	610	1,899	300	4.85-6.85
Soybean oil												
1986/87	—	—	—	—	12,783	13,745	—	10,833	1,187	12,020	1,725	15.40
1987/88	—	—	—	—	12,974	14,895	—	10,930	1,873	12,803	2,092	22.87
1988/89	—	—	—	—	11,737	13,967	—	10,591	1,661	12,252	1,715	21.10
1989/90 [*]	—	—	—	—	13,004	14,741	—	12,083	1,353	13,436	1,305	22.30
1990/91 [*]	—	—	—	—	13,185	14,505	—	12,000	700	12,700	1,805	21.00
1991/92 [*]	—	—	—	—	13,325	15,140	—	12,100	900	13,000	2,140	18.5-20.5
Soybean meal												
1986/87	—	—	—	—	27,758	27,970	—	20,367	7,343	27,730	240	183
1987/88	—	—	—	—	28,060	28,300	—	21,293	6,854	28,147	153	222
1988/89	—	—	—	—	24,943	25,100	—	19,657	5,270	24,927	173	233
1989/90 [*]	—	—	—	—	27,719	27,900	—	22,558	5,024	27,582	318	174
1990/91 [*]	—	—	—	—	27,987	28,300	—	22,700	6,200	27,900	400	170
1991/92 [*]	—	—	—	—	28,385	28,800	—	23,000	5,500	28,600	300	160-200

See footnotes at end of table.

Table 17.—Supply & Utilization, continued

Area	Set Aside 3/			Planted	Harvested	Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending Stocks	Farm price \$/
	Mil. acres	Lb./acres	Mil. bales											
Cotton 10/														
1986/87	4.2	10.0	8.6	552	9.7	19.1	—	7.5	6.7	14.1	6.0	52.40		
1987/88	4.0	10.4	10.0	706	14.8	19.8	—	7.6	6.6	14.2	5.8	54.30		
1988/89	2.2	12.5	11.9	619	15.6	21.2	—	7.8	6.1	13.9	7.1	56.60		
1989/90*	3.5	10.8	9.5	614	12.2	19.3	—	6.8	7.7	16.5	3.0	66.20		
1990/91*	2.0	12.3	11.7	634	15.5	18.5	—	8.0	7.0	16.5	2.2	67.80		
1991/92*	0.9	14.1	13.4	630	17.6	19.8	—	8.8	7.0	15.8	4.1	11/		

* August 12, 1991 Supply & Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, & oats; August 1 for cotton & rice; September 1 for soybeans, corn, & sorghum; October 1 for soymeal & soyoil. 2/ Conversion factors: Hectare (ha.) = 2.471 acre, 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9294 bushels of barley, 88.8944 bushels of oats, 22.046 cwt of rice, & 4.59 480-pound bales of cotton. 3/ Includes diversion, PLIK, acreage reduction, 60-92, & 8-82 programs. Data for 1991/92 are preliminary. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding & Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 percent, Decatur. 10/ Upland & extra long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply & use estimates & changes in ending stocks. 11/ USDA is prohibited from publishing cotton price projections. — = not available or not applicable.

Information contact: Commodity Economics Division, Crops Branch (202) 219-0840.

Table 18.—Food Grains

	Marketing year 1/				1990		1991			
	1986/87	1987/88	1988/89	1989/90	June	Feb	Mar	Apr	May	June
Wholesale prices										
Wheat, No. 1 HRW, Kansas City (\$/bu.) 2/	2.72	2.96	4.17	4.22	3.60	2.77	2.94	2.98	3.04	2.99
Wheat, DNS, Minneapolis (\$/bu.) 3/	3.07	3.15	4.36	4.18	3.96	2.85	3.00	3.07	3.10	3.04
Rice, S.W. La. (\$/cwt) 4/	10.25	19.25	14.85	15.55	16.00	15.45	16.75	16.40	16.50	17.25
Wheat										
Exports (mil. bu.)	999	1,598	1,419	1,233	89	85	119	92	85	88
Mill grind (mil. bu.)	755	753	709	781	80	86	82	88	70	—
Wheat flour production (mil. cwt)	335	336	345	351	27	29	27	30	31	—
Rice										
Exports (mil. cwt, rough equiv.)	84.2	72.2	85.0	76.8	3.1	7.3	8.4	5.3	4.8	—
Marketing year 1/										
	1987/88	1988/89	1989/90	Sept-Nov	Dec-Feb	Mar-May	June-Aug	Sept-Nov	Dec-Feb	Mar-May
Wheat										
Stocks, beginning (mil. bu.)	1,821	1,261	702	1,917.2	1,423.7	943.1	536.5	2,400.5	1,908.0	1,396.0
Domestic use										
Food (mil. bu.)	721	726	753	191.6	185.7	185.0	196.4	211.2	192.7	195.6
Seed, feed & residual (mil. bu.) 5/	365	249	239	-17.5	38.0	-47.8	409.0	25.7	101.0	45.3
Exports (mil. bu.)	1,598	1,419	1,233	328.6	259.7	275.2	268.1	278.0	225.6	290.3

1/ Beginning June 1 for wheat & August 1 for rice. 2/ Ordinary protein. 3/ 14% protein. 4/ Long grain, milled basis. 5/ Residual includes feed use. — = not available.

Information contact: Ed Allen & Janet Uvezey (202) 219-0840.

Table 19.—Cotton

	Marketing year 1/				1990		1991			
	1986/87	1987/88	1988/89	1989/90	June	Feb	Mar	Apr	May	June
U.S. price, SLM, 1-1/16 in. (cts./lb.) 2/										
Northern Europe prices Index (cts./lb.) 3/	53.2	63.1	57.7	69.8	77.1	77.7	77.9	79.9	83.0	79.1
U.S. M 1-3/32 in. (cts./lb.) 4/	61.8	78.3	69.2	83.6	90.3	85.2	83.7	83.2	84.4	83.8
Marketing year 1/										
	1986/87	1987/88	1988/89	1989/90	I	II	III	IV	I	II
U.S. mill consumpt. (1,000 bales)										
Exports (1,000 bales)	7,452	7,817	7,782	8,759	2,201	2,232	2,182	1,954	2,152	2,317
Stocks, ending (1,000 bales)	6,684	8,582	8,148	7,694	2,669	1,862	1,396	1,884	3,118	1,637
1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Cotlook (A) index; average of five lowest prices of 11 selected growths. 4/ Memphis territory growths. — = not available.										

Information contact: Bob Skinner (202) 219-0840.

Table 20.—Feed Grains

	Marketing year 1/				1990	1991				
	1986/87	1987/88	1988/89	1989/90	June	Feb	Mar	Apr	May	June
Wholesale prices										
Corn, no. 2 yellow, 30 day, Chicago (\$/bu.)	1.64	2.14	2.68	2.53	2.84	2.44	2.52	2.59	2.50	2.43
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	2.73	3.40	4.17	4.21	4.54	4.21	4.35	4.34	4.13	4.02
Barley, feed, Duluth (\$/bu.) 2/	1.44	1.78	2.32	2.20	2.39	2.15	2.14	2.12	2.13	2.02
Barley, malting, Minneapolis (\$/bu.)	1.89	2.04	4.11	3.20	2.92	2.38	2.48	2.48	2.41	2.26
Exports 3/										
Corn (mil. bu.)	1,492	1,716	2,028	2,369	201	183	189	144	120	—
Feed grains* (mil. metric tons) 4/	45.9	52.3	61.1	69.7	5.4	5.4	5.6	4.4	3.5	—
Marketing year 1/					1990				1991	
Corn	1986/87	1987/88	1988/89	1989/90	Mar-May	June-Aug	Sept-Nov	Dec-Feb	Mar-May	June-Aug
	4,040	4,882	4,259	1,930	4,812	2,843	1,344	6,940	4,789	2,992
Stocks, beginning (mil. bu.)										
Domestic use										
Feed (mil. bu.)	4,701	4,812	3,981	4,455	1,014	656	1,848	1,378	981	—
Food, seed, ind. (mil. bu.)	1,182	1,229	1,251	1,290	355	340	307	305	363	—
Exports (mil. bu.)	1,492	1,716	2,028	2,369	601	503	383	471	454	—
Total use (mil. bu.)	7,385	7,757	7,260	8,113	1,970	1,499	2,338	2,152	1,798	—

1/ September 1 for corn & sorghum; June 1 for oats & barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Does not include products. 4/ Aggregated data for corn, sorghum, oats, & barley. — = not available.

Information contact: Joy Harwood (202) 219-0840.

Table 21.—Fats & Oils

	Marketing year *				1990			1991		
	1986/87	1987/88	1988/89	1989/90	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	
Soybeans										
Wholesale price, no. 1 yellow, Chicago (\$/bu.)	5.03	6.67	7.41	5.86	6.07	5.56	5.86	5.70	5.73	
Crushings (mil. bu.)	1,178.8	1,174.5	1,057.7	1,146.0	280.5	278.5	314.7	297.9	280.1	
Exports (mil. bu.)	756.0	801.6	527.0	623.0	101.9	76.0	148.4	192.2	118.5	
Stocks, beginning (mil. bu.)	536.4	436.4	302.5	182.0	—	—	—	—	—	
Soybean oil										
Wholesale price, crude, Decatur (cts./lb.)	15.36	22.67	21.09	22.28	24.37	24.73	21.73	21.56	20.43	
Production (mil. lb.)	12,783.1	12,974.5	11,737.0	13,003.6	3,118.8	2,728.7	3,150.0	3,331.1	3,120.9	
Domestic disp. (mil. lb.)	10,833.0	10,930.0	10,591.0	12,083.0	3,152.6	3,135.3	3,494.0	2,849.7	3,116.8	
Exports (mil. lb.)	1,187.0	1,873.2	1,661.0	1,353.0	306.9	503.7	204.7	21.1	88.6	
Stocks, beginning (mil. lb.)	946.6	1,725.0	2,092.2	1,715.4	1,694.9	1,421.7	1,305.0	1,463.8	1,874.8	
Soybean meal										
Wholesale price, 44% protein, Decatur (\$/ton)	182.81	221.90	233.46	173.75	170.30	173.54	166.77	161.4	171.2	
Production (1,000 ton)	27,758.0	28,060.2	24,942.7	27,719.0	6,671.3	6,621.0	7,543.5	7,082.0	6,640.8	
Domestic disp. (1,000 ton)	20,387.4	21,293.0	19,657.0	22,558.0	5,445.7	5,719.6	6,102.1	5,469.0	5,666.4	
Exports (1,000 ton)	7,343.0	6,854.0	5,270.0	5,024.4	1,274.9	850.6	1,208.6	1,556.4	1,075.2	
Stocks, beginning (1,000 ton)	211.7	240.2	153.5	172.0	262.5	313.3	318.0	455.8	527.8	
Margarine, wholesale price, Chicago, white (cts./lb.)										
	40.3	40.3	52.3	54.89	59.3	62.6	62.0	63.2	62.1	

* Beginning September 1 for soybeans; October 1 for soymeal & oil; calendar year for margarine. — = not available

Information contact: Roger Hoskin (202) 219-0840.

Table 22.—Farm Programs, Price Supports, Participation & Payment Rates

	Target price	Loan rate	Findley loan rate 1/	Payment rates			Effective base acre 2/	Program 3/	Participation rate 4/
				Deficiency		Paid land diversion			
				Mandatory	Optional		Mkt. acres	Percent of base	Percent of base
\$/bu.									
Wheat									
1985/86	4.38	3.30	—	1.08	2.70	—	94.0	20/10/0	73
1986/87 5/	4.38	3.00	2.40	1.98	1.10	2.00	91.6	22.5/2.5/5-10	85
1987/88	4.38	2.85	2.28	1.81	—	—	87.6	27.5/0/0	88
1988/89	4.23	2.76	2.21	0.69	—	—	84.8	27.5/0/0	86
1989/90	4.10	2.58	2.06	0.32	—	—	82.3	10/0/0	78
1990/91 6/	4.00	2.44	1.95	1.28	—	—	80.6	7/ 5/0/0	83
1991/92	4.00	2.52	2.04	1.47	—	—	79.3	15/0/0	85
1992/93	4.00	—	—	—	—	—	—	5/0/0	—
\$/cwt									
Rice									
1985/86	11.90	8.00	8/ 3.18	3.90	3.50	—	4.2	20/15/0	90
1986/87 5/	11.90	7.20	8/ 3.94	4.70	—	—	4.2	35/0/0	94
1987/88	11.66	6.84	8/ 5.70	4.82	—	—	4.2	35/0/0	96
1988/89	11.15	6.63	8/ 6.21	4.31	—	—	4.2	25/0/0	94
1989/90	10.80	6.50	8/ 5.71	3.56	—	—	4.2	25/0/0	96
1990/91 6/	10.71	6.50	8/ 5.08	4.21	—	—	4.2	20/0/0	94
1991/92	10.71	6.50	—	3.78	—	—	4.2	5/0/0	95
\$/bu.									
Corn									
1985/86	3.03	2.56	—	0.48	—	—	84.2	10/0/0	69
1986/87 5/	3.03	2.40	1.92	1.11	—	—	81.7	17.5/2.5/0	86
1987/88	3.03	2.28	1.82	1.09	0.73	2.00	81.6	20/0/15	85
1988/89	2.93	2.21	1.77	0.38	—	1.76	82.0	20/0/10	87
1989/90	2.84	2.00	1.65	0.58	—	—	82.7	10/0/0	80
1990/91 6/	2.76	1.96	1.57	0.53	—	—	82.0	10/0/0	77
1991/92	2.76	1.89	1.62	0.58	—	—	82.0	7.5/0/0	77
\$/bu.									
Sorghum									
1985/86	2.88	2.42	—	0.46	—	—	19.3	9/ (same)	55
1986/87 5/	2.88	2.28	1.82	1.06	0.65	—	19.0	—	74
1987/88	2.88	2.17	1.74	1.14	—	1.80	17.4	—	85
1988/89	2.78	2.10	1.68	0.48	—	1.65	16.8	—	82
1989/90	2.70	1.96	1.57	0.66	—	—	16.2	—	71
1990/91 6/	2.61	1.86	1.49	0.58	—	—	15.4	—	70
1991/92	2.61	1.80	1.54	0.56	—	—	13.6	—	77
\$/bu.									
Barley									
1985/86	2.60	2.08	—	0.62	—	—	13.3	9/ (same)	57
1986/87 5/	2.60	1.95	1.56	0.99	0.57	—	12.4	—	72
1987/88	2.60	1.86	1.49	0.79	—	1.80	12.6	—	85
1988/89	2.51	1.80	1.44	0.00	—	1.40	12.4	—	78
1989/90	2.43	1.68	1.34	0.00	—	—	12.3	—	67
1990/91 6/	2.38	1.60	1.28	0.22	—	—	11.9	—	68
1991/92	2.38	1.64	1.32	0.47	—	—	11.6	—	76
\$/bu.									
Oats									
1985/86	1.00	1.31	—	0.29	—	—	9.4	9/ (same)	14
1986/87 5/	1.00	1.23	0.99	0.39	0.38	—	9.2	—	38
1987/88	1.00	1.17	0.94	0.20	—	0.80	8.4	—	45
1988/89	1.55	1.14	0.90	0.00	—	—	7.0	5/0/0	30
1989/90	1.50	1.06	0.85	0.00	—	—	7.0	5/0/0	18
1990/91 6/	1.45	1.01	0.81	0.33	—	—	7.6	5/0/0	09
1991/92	1.45	0.97	0.83	0.15	—	—	7.3	0/0/0	38
\$/bu.									
Soybeans 10/									
1985/86	—	5.02	—	—	—	—	—	—	—
1986/87 5/	—	4.77	—	—	—	—	—	—	—
1987/88	—	4.77	—	—	—	—	—	—	—
1988/89	—	4.77	—	—	—	—	—	—	—
1989/90	—	4.53	—	—	—	—	—	11/ 10/25	—
1990/91 6/	—	4.50	—	—	—	—	—	11/ 10/25	—
1991/92	—	5.02	—	—	—	—	—	11/ 0/26	—
Cts./lb.									
Upland cotton									
1985/86	81.0	57.30	57.30	23.70	30.00	—	16.0	20/10/0	82
1986/87 5/	81.0	55.00	12/ 44.00	26.00	—	—	15.6	25/0/0	92
1987/88	79.4	52.25	13/ 60.00	17.3	—	—	14.5	25/0/0	93
1988/89	75.9	51.80	13/ 51.80	19.4	—	—	14.5	12.5/0/0	89
1989/90	73.4	50.00	13/ 65.05	13.1	—	—	14.6	25/0/0	89
1990/91 6/	72.9	50.27	13/ 53.00	7.3	—	—	14.4	12.5/0/0	88
1991/92	72.9	50.77	13/ —	10.0	—	—	14.6	5/0/0	84

1/ There are no Findley loan rates for rice or cotton. See footnotes 8, 12, and 13. 2/ National effective crop acreage base as determined by ASCS. Net of CRP. 3/ Program requirements for participating producers (mandatory acreage reduction program/mandatory paid land diversion/optional paid land diversion). Acres idled must be devoted to a conserving use to receive program benefits. 4/ Percentage of effective base acres enrolled in acreage reduction programs. 5/ Payments and loans received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 6/ Payments and loans were reduced by 1.4 percent in 1990/91 due to Gramm-Rudman-Hollings. Budget Reconciliation Act reductions to deficiency payment rates were also in effect in that year. Data do not include these reductions. 7/ Under 1990 modified contracts, participating producers plant up to 105 percent of their wheat base acres. For every acre planted above 95 percent of base, the acreage used to compute deficiency payments was cut by 1 acre. 8/ A marketing loan has been in effect for rice since 1985/86. Loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly). However, loans cannot be repaid at less than a specified fraction of the loan rate. Data refer to annual average adjusted world prices. 9/ The sorghum, oats, and barley programs are the same as for corn except as indicated. 10/ There are no target prices, base acreage reduction programs, or deficiency payment rates for soybeans. 11/ Nominal percentage of program crop base acres permitted to shift into soybeans without loss of 12/ A marketing loan has been in effect for cotton since 1986/87. The loan repayment rate was fixed at 80 percent of the loan rate in 1986/87 (Plan A). 13/ In 1987/88 and after, loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly; Plan B). Starting in 1991/92, loans cannot be repaid after more than 70 percent of the loan rate. Data refer to annual average adjusted world prices.

Table 23.—Fruit

	1982	1983	1984	1985	1986	1987	1988	1989	1990 P
Citrus 1/									
Production (1,000 ton)	12,139	13,682	10,832	10,525	11,058	11,993	12,761	13,186	10,845
Per capita consumpt. (lbs.) 2/	24.8	29.5	24.0	22.6	26.1	25.8	26.4	24.9	22.6
Noncitrus 3/									
Production (1,000 tons)	14,658	14,168	14,301	14,191	13,874	16,011	15,893	16,335	15,805
Per capita consumpt. (lbs.) 2/	62.8	63.8	67.7	66.7	69.8	75.4	72.7	74.3	69.8
	1990							1991	
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
F.o.b. shipping point prices									
Apples (\$/carton) 4/	12.16	13.00	13.08	14.06	14.00	14.00	14.00	14.00	14.00
Pears (\$/box) 5/	—	12.56	13.00	14.00	13.85	13.48	13.74	15.12	18.90
Grower prices									
Oranges (\$/box) 6/	4.48	8.31	8.18	8.62	5.98	7.41	7.37	7.95	21.35
Grapefruit (\$/box) 6/	6.51	5.53	5.63	5.66	4.50	5.43	5.10	4.91	5.44
Stocks, ending									
Fresh apples (mil. lbs.)	4,590.0	4,003.7	3,378.3	2,894.8	2,100.7	1,569.8	1,080.9	690.7	386.2
Fresh pears (mil. lbs.)	449.6	322.6	266.2	191.1	145.4	95.0	50.8	14.7	—
Frozen fruits (mil. lbs.)	912.7	864.5	838.0	760.7	679.6	635.2	566.7	549.8	588.2
Frozen orange juice (mil. lbs.)	802.0	871.3	1,031.6	1,195.8	1,199.5	1,238.7	1,363.2	1,304.7	1,073.0

1/ 1990 indicated 1989/90 season. 2/ Fresh per capita consumption. 3/ Calendar year. 4/ Red delicious, Washington, extra fancy, carton tray pack, 125's. 5/ D'Anjou, Washington, standard box wrapped, U.S. no. 1, 135's. 6/ U.S. equivalent on-tree returns. P = preliminary. — = not available.

Information contact: Wynnice Napper (202) 219-0884.

Table 24.—Vegetables

	Calendar year									
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Production										
Total vegetables (1,000 cwt)	392,343	430,795	403,509	456,334	453,030	448,629	478,381	468,779	542,437	561,768
Fresh (1,000 cwt) 1/3/	183,456	193,451	185,782	201,817	203,549	203,165	220,539	228,397	239,281	239,114
Processed (tons) 2/3/	10,444,330	11,867,170	10,886,350	12,725,880	12,474,040	12,273,200	12,892,100	12,019,110	15,157,790	16,132,080
Mushrooms (1,000 lbs.)	571,148	490,826	561,531	595,661	587,956	814,393	631,819	667,759	715,010	—
Potatoes (1,000 cwt)	340,623	355,131	333,726	362,039	406,608	361,743	389,320	356,438	370,444	393,867
Sweetpotatoes (1,000 cwt)	12,799	14,833	12,083	12,902	14,573	12,368	11,611	10,945	11,358	13,020
Dry edible beans (1,000 cwt)	32,751	25,563	15,520	21,070	22,175	22,886	26,031	19,253	23,729	32,429
Shipments										
	1990				1991					
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Fresh (1,000 cwt) 4/	14,898	20,451	17,623	17,112	23,352	19,405	18,215	20,661	30,842	26,747
Potatoes (1,000 cwt)	8,959	11,947	11,405	10,434	14,681	11,322	12,337	14,497	15,695	10,395
Sweetpotatoes (1,000 cwt)	302	562	620	445	502	462	466	466	466	466

1/ Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes. 2/ Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, & cauliflower. 3/ Asparagus & cucumber estimates were not available for 1982 & 1983. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell pepper, squash, tomatoes, cantaloupe, honeydews, & watermelons. — = not available.

Information contacts: Gary Lucier or Cathy Greene (202) 219-0884.

Table 25.—Other Commodities

	Annual					1990			1991	
	1986	1987	1988	1989	1990	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June
Sugar										
Production 1/	6,257	7,309	7,087	6,840	6,319	572	652	3,418	2,206	626
Deliveries 1/	7,786	8,167	8,188	8,309	8,633	2,058	2,318	2,315	2,010	2,103
Stocks, ending 1/	3,225	3,195	3,132	2,948	2,642	2,165	1,210	2,720	3,530	2,487
Coffee										
Composite green price										
N.Y. (cts./lb.)	185.18	109.14	115.59	95.17	78.93	78.55	79.10	78.85	74.94	72.13
Imports, green bean										
equival. (mill. lbs.) 2/	2,696	2,838	2,072	2,630	2,714	702	530	618	748	563
Tobacco										
Prices at auctions 3/										
Flue-cured (\$/lb.)	1.59	1.61	—	—	—	—	1.73	1.72	1.65	—
Burley (\$/lb.)	1.58	1.61	—	1.67	—	—	—	—	1.75	1.75
Domestic consumption 4/										
Cigarettes (\$/bill.)	575.0	562.5	540.1	34.3	39.8	49.9	43.3	44.0	45.6	34.1
Large cigars (mill.)	2,728	2,631	2,467.6	177.8	164.4	210.8	195.6	191.1	199.8	157.9

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green & processed coffee. 3/ Crop year July-June for flue-cured, Oct.-Sept. for burley. 4/ Taxable removals. — = not available.

Information contact: Author: Peter RAYMOND (202) 219-2886, e-mail: Peter.Raymond@epa.gov; John R. Verner (202) 219-0890, e-mail: John.Verner@epa.gov

World Agriculture

Table 26.—World Supply & Utilization of Major Crops, Livestock, & Products

	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91 P	1991/92 F
Million units							
Wheat							
Area (hectares)	229.8	228.2	220.0	218.0	226.3	231.9	223.6
Production (metric tons)	500.1	530.7	502.3	501.4	537.6	593.0	550.5
Exports (metric tons) 1/	85.0	90.7	104.9	97.2	96.2	94.0	105.3
Consumption (metric tons) 2/	496.2	522.5	530.3	532.0	534.3	572.1	580.1
Ending stocks (metric tons) 3/	168.2	178.4	148.4	117.9	121.1	142.0	132.3
Coarse grains							
Area (hectares)	341.3	336.5	324.5	326.1	321.0	319.2	320.5
Production (metric tons)	843.1	831.9	794.8	733.2	800.0	827.3	798.6
Exports (metric tons) 1/	83.2	83.7	82.5	94.2	100.0	85.0	83.0
Consumption (metric tons) 2/	778.8	806.1	815.2	797.5	824.8	822.3	811.6
Ending stocks (metric tons) 3/	208.2	234.0	213.6	148.3	124.5	128.5	116.5
Rice, milled							
Area (hectares)	144.9	145.3	141.6	145.6	146.6	147.0	147.2
Production (metric tons)	318.9	318.7	314.2	330.9	344.0	348.3	344.2
Exports (metric tons) 4/	12.6	12.0	11.9	15.1	12.0	12.6	12.9
Consumption (metric tons) 2/	319.4	322.7	320.0	328.6	337.5	345.8	345.7
Ending stocks (metric tons) 3/	55.4	51.4	45.6	47.9	54.5	57.1	56.6
Total grains							
Area (hectares)	715.8	710.0	688.1	689.7	693.9	698.1	691.3
Production (metric tons)	1,662.1	1,681.3	1,611.3	1,565.5	1,881.6	1,768.6	1,693.3
Exports (metric tons) 1/	180.8	187.3	199.3	206.5	208.2	191.6	201.2
Consumption (metric tons) 2/	1,584.4	1,851.3	1,665.5	1,858.1	1,898.6	1,740.2	1,717.4
Ending stocks (metric tons) 3/	431.8	461.8	407.6	315.1	300.1	328.6	304.4
Oilseeds							
Crush (metric tons)	155.1	161.8	168.5	166.4	173.2	177.4	179.4
Production (metric tons)	196.2	194.9	210.6	204.2	214.0	217.4	220.8
Exports (metric tons)	34.5	37.7	39.5	32.0	36.1	34.3	34.4
Ending stocks (metric tons)	28.8	23.3	24.0	22.2	23.2	22.2	22.6
Meals							
Production (metric tons)	105.0	110.7	115.4	112.2	117.9	119.6	121.1
Exports (metric tons)	34.4	36.7	35.8	37.7	38.8	39.0	38.9
Oils							
Production (metric tons)	49.4	50.4	53.3	53.9	57.6	58.5	60.2
Exports (metric tons)	16.4	16.9	17.5	18.3	20.1	19.6	20.0
Cotton							
Area (hectares)	31.7	29.5	31.0	33.7	31.6	33.3	34.8
Production (bales)	80.4	70.7	81.0	84.7	80.0	86.7	91.1
Exports (bales)	20.3	26.0	23.2	25.9	24.0	23.4	23.8
Consumption (bales)	76.9	82.8	84.1	85.3	88.5	85.6	88.0
Ending stocks (bales)	48.5	35.0	32.8	32.0	26.4	27.5	30.0
	1985	1986	1987	1988	1989	1990 P	1991 F
Red meat							
Production (metric tons)	105.5	108.6	111.5	115.2	116.9	118.3	119.7
Consumption (metric tons)	103.4	107.4	109.7	113.4	115.2	116.8	118.1
Exports (metric tons) 1/	6.3	6.7	8.7	8.9	7.4	6.9	7.2
Poultry 5/							
Production (metric tons)	28.2	29.3	31.3	32.0	34.2	35.7	37.2
Consumption (metric tons)	25.8	28.9	30.8	32.5	33.8	35.1	36.6
Exports (metric tons) 1/	1.2	1.2	1.5	1.7	1.8	2.1	2.2
Dairy							
Milk production (metric tons)	413.4	425.9	425.0	429.1	435.0	440.9	442.1

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years & do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1988 data correspond with 1985/86, etc. 5/ Poultry excludes the Peoples Republic of China before 1986. P = preliminary. F = forecast.

Information contacts: Crops, Carol Whitton (202) 219-0824; red meat & poultry, Linda Bailey (202) 219-1285; dairy, Sara Short (202) 219-0770.

U.S. Agricultural Trade

Table 27.—Prices of Principal U.S. Agricultural Trade Products.

	Annual			1990		1991					
	1988	1989	1990	June	Jan	Feb	Mar	Apr	May	June	
Export commodities											
Wheat, f.o.b., vessel, Gulf ports (\$/bu.)	3.87	4.85	3.72	3.69	3.05	3.13	3.28	3.31	3.35	3.29	
Corn, f.o.b., vessel, Gulf ports (\$/bu.)	2.73	2.85	2.79	3.06	2.71	2.74	2.79	2.81	2.70	2.68	
Grain sorghum, f.o.b., vessel, Gulf ports (\$/bu.)	2.62	2.70	2.65	2.70	2.68	2.72	2.80	2.79	2.82	2.51	
Soybeans, f.o.b., vessel, Gulf ports (\$/bu.)	7.81	7.06	6.24	6.23	6.03	6.08	6.14	6.20	6.09	6.03	
Soybean oil, Decatur (cts./lb.)	23.52	20.21	22.75	24.96	21.42	21.48	22.20	21.46	20.29	19.55	
Soybean meal, Decatur (\$/ton)	234.75	218.50	169.37	169.50	156.36	164.01	165.70	171.32	171.14	171.43	
Cotton, 8-market avg. spot (cts./lb.)	57.25	63.78	71.25	77.06	70.51	77.09	77.92	79.93	83.94	79.05	
Tobacco, avg. price at auction (cts./lb.)	147.82	161.74	166.06	164.68	171.81	171.70	170.89	171.12	171.12	171.12	
Rice, f.o.b., mill, Houston (\$/cwt.)	19.60	15.88	15.52	16.25	14.50	16.00	16.00	16.00	16.00	17.00	
Inedible tallow, Chicago (cts./lb.)	16.64	14.71	13.54	14.01	14.43	12.91	13.63	13.57	12.25	12.48	
Import commodities											
Coffee, N.Y. spot (\$/lb.)	1.21	1.04	0.81	0.78	0.82	0.80	0.82	0.80	0.76	0.71	
Rubber, N.Y. spot (cts./lb.)	59.20	50.65	46.28	46.00	47.47	48.82	49.09	45.92	45.18	45.26	
Cocoa beans, N.Y. (\$/lb.)	0.69	0.55	0.55	0.57	0.66	0.63	0.63	0.60	0.47	0.45	

Information contact: Mary Teymourian (202) 219-0824.

Table 28.—Indexes of Real Trade-Weighted Dollar Exchange Rates¹

	1990					1991					
	Aug	Sept	Oct	Nov	Dec	Jan	Feb P	Mar P	Apr P	May P	June P
	1985 = 100										
Total U.S. trade ^{2/}	63.4	63.1	61.1	60.1	60.8	61.0	59.8	63.5	66.4	66.7	68.7
Agricultural trade											70.1
U.S. markets	78.2	79.6	76.6	75.7	78.3	76.5	75.5	77.3	78.8	79.0	78.9
U.S. competitors	78.2	75.3	75.0	73.7	73.0	75.3	74.2	75.4	76.4	76.6	77.1
Wheat											77.4
U.S. markets	98.4	98.3	95.5	94.8	98.2	97.3	96.1	98.9	97.3	97.8	98.3
U.S. competitors	72.3	70.8	69.6	68.6	68.0	69.2	68.7	70.3	71.1	71.1	71.6
Soybeans											71.7
U.S. markets	67.1	66.3	64.2	63.3	63.9	64.3	63.1	65.6	68.3	68.7	70.3
U.S. competitors	63.7	58.2	57.9	54.0	53.1	59.0	57.7	58.9	58.9	58.9	57.0
Corn											73.9
U.S. markets	73.9	72.3	70.1	69.4	70.3	70.3	69.1	71.3	72.2	72.4	73.3
U.S. competitors	69.6	65.2	61.4	58.3	57.1	61.3	60.7	63.1	64.7	65.0	65.8
Cotton											66.4
U.S. markets	75.9	74.9	72.8	72.3	73.2	73.3	72.3	74.4	75.0	75.2	75.8
U.S. competitors	89.4	89.2	98.0	85.9	85.0	84.8	83.3	82.0	81.8	81.3	80.7
											79.0

1/ Real indexes adjust nominal exchange rates for differences in rates of inflation, to avoid the distortion caused by high-inflation countries. A higher value means the dollar has appreciated. See the October 1988 issue of Agricultural Outlook for a discussion of the calculations and the weights used. 2/ Federal Reserve Board Index of trade-weighted value of the U.S. dollar against 10 major currencies. Weights are based on relative importance in world financial markets. P = preliminary.

Information contact: Tim Baxter, David Stallings (202) 219-0719.

Table 29.—Trade Balance

	Fiscal year 1/									May
	1984	1985	1986	1987	1988	1989	1990	1991 F		
	\$ million									
Exports										
Agricultural	38,027	31,201	26,312	27,076	35,316	39,637	40,182	37,000	3,092	
Nonagricultural	170,014	179,236	179,291	202,911	258,656	301,222	325,928	—	31,341	
Total ^{2/}	208,041	210,437	205,603	230,787	293,972	340,859	366,110	—	34,433	
Imports										
Agricultural	18,916	19,740	20,884	20,650	21,014	21,477	22,514	22,500	1,986	
Nonagricultural	297,736	313,722	342,846	367,374	409,138	441,074	458,147	—	37,559	
Total ^{3/}	316,652	333,462	363,730	388,024	430,152	482,551	480,661	—	39,525	
Trade balance										
Agricultural	19,111	11,461	5,428	7,226	14,302	18,100	17,668	14,500	1,126	
Nonagricultural	-127,722	-134,480	-163,555	-164,483	-150,482	-139,852	-132,219	—	-6,218	
Total	-108,811	-123,025	-158,127	-157,237	-136,180	-121,692	-114,551	—	-5,082	

1/ Fiscal years begin October 1 & end September 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. 2/ Domestic exports including Department of Defense shipments (F.A.S. value). 3/ Imports for consumption (customs value). F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 30.—U.S. Agricultural Exports & Imports

	Fiscal year*			May 1991	Fiscal year*			May 1991	
	1989	1990	1991 F		1989	1990	1991 F		
	1,000 units				\$ million				
EXPORTS									
Animals, live (no.) 1/	758	685	—	111	475	381	—	29	
Meats & preps., excl. poultry (mt)	869	878	2/ 700	83	2,355	2,457	—	250	
Dairy Products (mt) 1/	192	92	—	2	475	348	400	28	
Poultry meats (mt)	428	567	600	51	510	631	—	63	
Fats, oils, & greases (mt)	1,377	1,264	1,100	87	531	459	—	33	
Hides & skins incl. furskins	—	—	—	—	1,713	1,798	—	130	
Cattle hides, whole (no.) 1/	26,280	24,777	—	1,720	1,360	1,365	—	98	
Mink pelts (no.) 1/	3,073	5,128	—	582	81	118	—	14	
Grains & feeds (mt)	114,692	112,987	—	7,138	16,821	15,694	3/ 12,400	965	
Wheat (mt)	37,641	27,999	27,500	2,225	6,004	4,209	4/ 3,100	243	
Wheat flour (mt)	1,176	882	1,000	70	255	203	—	14	
Rice (mt)	3,041	2,501	2,400	210	955	829	800	72	
Feed grains, incl. products (mt)	60,958	68,510	52,000	3,595	7,374	8,093	5,700	414	
Feeds & fodders (mt)	11,088	11,125	5/ 11,100	972	1,849	1,828	—	169	
Other grain products (mt)	790	970	—	66	384	534	—	53	
Fruits, nuts, & preps. (mt)	2,555	2,873	—	194	2,394	2,788	—	219	
Fruit juices incl.									
froz. (1,000 hectoliters) 1/	4,997	5,975	—	608	264	328	—	33	
Vegetables & preps. (mt)	1,665	2,243	—	247	1,542	2,079	—	247	
Tobacco, unmanufactured (mt)	212	220	200	28	1,274	1,373	1,400	205	
Cotton, excl. linters (mt)	1,441	1,666	1,800	120	2,040	2,704	3,000	198	
Seeds (mt)	511	578	—	18	507	578	600	24	
Sugar, cane or beet (mt)	368	447	—	47	134	187	—	17	
Oilseeds & products (mt)	21,052	23,772	—	1,805	6,629	6,098	5,500	413	
Oilseeds (mt)	14,592	17,703	—	1,112	4,363	4,246	—	279	
Soybeans (mt)	14,093	17,217	14,700	1,080	4,085	3,939	3,400	248	
Protein meal (mt)	4,963	4,767	—	417	1,358	1,022	—	82	
Vegetable oils (mt)	1,498	1,302	—	76	908	830	—	52	
Essential oils (mt)	13	14	—	1	171	182	—	15	
Other	108	89	—	9	1,802	2,120	—	224	
Total	145,481	147,688	129,000	8,630	39,637	40,182	37,000	3,092	
IMPORTS									
Animals, live (no.) 1/	2,485	2,940	—	310	740	1,053	1,100	113	
Meats & preps., excl. poultry (mt)	1,091	1,142	—	108	2,432	2,848	—	271	
Beef & veal (mt)	668	754	750	74	1,525	1,842	1,800	187	
Pork (mt)	371	340	370	28	778	888	1,000	75	
Dairy products (mt) 1/	211	254	—	20	834	951	900	69	
Poultry & products 1/	—	—	—	—	130	129	—	11	
Fats, oils, & greases (mt)	14	19	—	4	14	15	—	2	
Hides & skins, incl. furskins 1/	—	—	—	—	241	135	—	21	
Wool, unmanufactured (mt)	82	47	—	4	319	187	—	13	
Grains & feeds (mt)	3,467	3,471	3,500	339	1,139	1,181	1,200	100	
Fruits, nuts, & preps., excl. juices (mt)	5,036	5,331	5,300	544	2,269	2,486	—	259	
Bananas & plantains (mt)	3,039	3,236	3,200	302	851	926	1,000	88	
Fruit juices (1,000 hectoliters) 1/	27,747	33,922	30,000	2,987	792	1,001	—	75	
Vegetables & preps. (mt)	2,217	2,242	—	161	1,959	2,264	2,100	187	
Tobacco, unmanufactured (mt)	169	193	180	15	521	588	600	47	
Cotton, unmanufactured (mt)	13	30	—	1	8	20	—	1	
Seeds (mt)	158	171	170	12	187	184	200	15	
Nursery stock & cut flowers 1/	—	—	—	—	466	519	—	50	
Sugar, cane or beet (mt)	1,657	1,769	—	69	620	734	—	27	
Oilseeds & products (mt)	1,917	2,034	—	185	946	964	1,000	80	
Oilseeds (mt)	424	534	—	41	159	206	—	13	
Protein meal (mt)	358	310	—	34	65	48	—	5	
Vegetable oils (mt)	1,133	1,188	—	110	721	710	—	62	
Beverages excl. fruit juices (1,000 hectoliters) 1/	13,967	13,543	—	1,169	1,815	1,867	—	160	
Coffee, tea, cocoa, spices	1,867	2,202	3,200	177	3,896	3,465	—	290	
Coffee, incl. products (mt)	1,084	1,290	1,200	95	2,487	1,897	2,000	184	
Cocoa beans & products (mt)	564	898	650	62	969	1,042	1,000	84	
Rubber & allied gums (mt)	827	840	850	61	1,051	712	700	51	
Other	—	—	—	—	1,097	1,229	—	114	
Total	—	—	—	—	21,477	22,514	22,500	1,968	

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. 1/ Not included in total volume and also other dairy products for 1989 & 1990. 2/ Forecasts for footnoted items 2/–6/ are based on slightly different groups of commodities. Fiscal 1990 exports of categories used in the 1991 forecasts were 2/ 676,000 m. tons. 3/ 16,014 million. 4/ 4,426 million i.e. includes flour. 5/ 11,065 million m. tons. F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 31.—U.S. Agricultural Exports by Region

Region & country	Fiscal year*			May 1991	Change from year* earlier			May 1991
	1989	1990	1991 F		1989	1990	1991 F	
	\$ million				Percent			
WESTERN EUROPE	7,074	7,331	7,000	488	-12	4	-4	-1
European Community (EC-12)	6,565	6,838	6,500	425	-12	4	-4	-4
Belgium-Luxembourg	431	431	—	43	1	0	—	43
France	474	469	—	24	-16	-1	—	-23
Germany, Fed. Rep.	918	1,096	—	57	-28	19	—	-7
Italy	809	704	—	48	-15	16	—	-6
Netherlands	1,847	1,637	—	123	-12	-11	—	31
United Kingdom	738	761	—	58	-10	3	—	-4
Portugal	307	338	—	14	-10	10	—	-52
Spain: Incl. Canary Islands	878	991	—	37	3	13	—	-41
Other Western Europe	510	493	400	43	-2	-3	0	43
Switzerland	168	171	—	19	-14	3	—	52
EASTERN EUROPE	422	533	500	13	-24	26	-20	-71
German Dem. Rep.	72	58	—	0	8	-20	—	-100
Poland	45	101	—	4	-73	124	—	-77
Yugoslavia	78	129	—	9	-26	69	—	224
Romania	62	210	—	0	-33	230	—	-98
USSR	3,299	2,989	1,600	71	70	-9	-47	-73
ASIA	18,677	18,131	18,700	1,441	17	-3	-8	-1
West Asia (Mideast)	2,273	1,995	2,000	142	19	-12	0	-2
Turkey	238	259	—	48	97	9	—	310
Iraq	791	497	0	0	8	-37	-100	-100
Israel, Incl. Gaza & W. Bank	331	285	—	36	-1	-14	—	36
Saudi Arabia	482	502	600	32	4	4	20	2
South Asia	1,161	729	—	8	44	-37	—	-82
Bangladesh	213	125	—	1	98	-41	—	-94
India	243	115	—	6	-31	-53	—	-17
Pakistan	599	391	100	2	117	-35	-75	-94
China	1,496	909	600	73	144	-39	-33	15
Japan	8,148	8,108	7,800	724	12	-1	-4	4
Southeast Asia	976	1,184	—	87	-4	21	—	-14
Indonesia	218	277	—	19	-9	28	—	-10
Philippines	344	351	400	24	0	2	0	-45
Other East Asia	4,623	5,207	4,700	407	7	13	-10	0
Taiwan	1,594	1,818	1,600	157	1	14	-11	25
Korea, Rep.	2,453	2,703	2,300	183	9	10	-15	-15
Hong Kong	675	685	800	67	18	19	14	3
AFRICA	2,280	2,009	1,800	147	0	-12	-10	-9
North Africa	1,796	1,524	1,400	106	8	-15	-7	-18
Morocco	218	168	—	10	12	-23	—	-15
Algeria	540	488	500	36	2	-11	0	-29
Egypt	955	781	800	46	21	-20	0	-23
Sub-Saharan	483	484	400	41	-21	0	0	28
Nigeria	30	32	—	3	-31	7	—	187
Rep. S. Africa	57	81	—	11	-34	43	—	435
LATIN AMERICA & CARIBBEAN	5,437	5,156	5,000	493	24	-5	-2	12
Brazil	149	105	200	12	-15	-30	100	158
Caribbean Islands	1,007	1,006	—	94	18	0	—	10
Central America	448	464	—	48	8	4	—	0
Colombia	139	147	—	17	-22	6	—	429
Mexico	2,755	2,666	2,400	260	60	-3	-11	4
Peru	81	187	—	13	-54	132	—	55
Venezuela	587	345	400	28	-2	-41	33	18
CANADA	2,179	3,716	4,300	432	10	71	16	7
OCEANIA	268	317	300	28	13	18	0	8
TOTAL	39,637	40,182	37,000	3,092	12	1	-8	-5
Developed countries	17,997	19,780	19,800	1,693	1	10	0	14
Less developed countries	16,423	15,970	14,500	1,242	14	-3	-9	-2
Centrally planned countries	5,217	4,431	2,700	157	68	-15	-39	-58

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. F = forecast. — = not available.

Note: Adjusted for transhipments through Canada.

Information contact: Stephen MacDonald (202) 219-0822.

Farm Income

Table 32.—Farm Income Statistics

	Calendar year										
	\$ billion										
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F
1. Farm receipts											
Crops (incl. net CCC loans)	144.1	147.2	141.3	147.1	149.4	140.2	147.5	155.9	166.5	174	170 to 176
Livestock	72.5	72.3	67.2	69.9	74.3	63.7	65.6	71.4	75.4	78	76 to 80
Farm related 1/	69.2	70.3	69.6	72.9	69.8	71.5	70.0	78.8	83.7	89	88 to 90
2. Direct Government payments	2.5	4.6	4.5	4.3	5.3	5.0	5.9	5.7	7.4	6	6 to 7
Cash payments	1.9	3.5	9.3	8.4	7.7	11.8	16.7	14.5	10.0	9	8 to 9
Value of PIK commodities	0.0	0.0	5.2	4.5	0.1	3.7	10.1	7.4	1.7	1	0 to 1
3. Total gross farm income (4+5+6) 2/	166.3	163.5	153.2	170.2	162.9	158.5	169.0	173.8	189.2	193	188 to 193
4. Gross cash income (1+2)	146.0	150.8	150.6	155.5	157.2	152.0	164.3	170.4	177.5	183	179 to 184
5. Nonmoney income 3/	13.8	14.3	13.5	8.7	8.0	6.9	7.5	7.5	7.3	8	7 to 9
6. Value of inventory change	6.5	-1.4	-10.9	6.0	-2.3	-2.4	-2.8	-4.1	4.4	3	0 to 3
7. Cash expenses 4/	113.2	112.8	111.0	119.0	109.3	105.2	108.2	112.3	122.8	125	124 to 129
8. Total expenses	139.4	140.0	137.9	143.8	131.9	125.5	127.7	132.1	142.6	146	145 to 150
9. Net cash income (4-7)	32.8	37.9	39.5	36.6	47.9	46.7	56.1	58.1	54.6	58	52 to 57
10. Net farm income (3-8)	26.0	23.5	15.3	26.3	31.0	31.0	41.3	41.8	46.7	47	40 to 45
Deflated (1982\$)	28.6	23.5	14.7	24.5	27.9	27.3	36.2	34.4	38.9	36	30 to 33
11. Off-farm income	35.8	38.4	37.0	39.2	55.2	54.6	56.9	57.7	57.5	—	—
12. Loan changes 5/: Real estate	9.0	3.8	2.3	-2.0	-6.4	-8.7	-7.7	-4.1	-2.1	—	—
13. 5/: Non-real estate	6.5	3.4	0.9	-0.8	-9.6	-11.0	-4.6	-0.3	0.1	—	—
14. Rental income plus monetary change	6.4	6.4	5.4	9.2	9.1	8.0	6.8	7.5	8.2	—	—
15. Capital expenditures 5/	16.8	13.3	12.7	12.5	9.2	8.5	11.1	11.1	13.0	—	—
16. Net cash flow (9+12+13+14-15)	37.8	38.2	35.3	30.4	31.9	26.6	39.5	50.2	48.0	—	—

1/ Income from machine hire, custom work, sales of forest products, & other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food & imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, & farm household expenses. 5/ Excludes farm households. Total may not add because of rounding. F = forecast. — = not available.

Information contact: Robert McElroy (202) 219-0800.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar year 1/										
	\$ billion										
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F
Assets											
Real estate	785.8	750.0	753.3	681.7	588.1	542.2	578.8	599.4	605.1	618	620 to 630
Non-real estate	196.8	195.8	191.9	196.0	187.4	182.1	185.3	203.6	212.0	220	218 to 228
Livestock & poultry	53.5	53.0	49.5	49.5	46.3	47.8	58.0	62.2	66.2	71	70 to 74
Machinery & motor vehicles	87.0	87.5	87.4	86.0	83.6	81.9	79.4	80.6	83.8	86	85 to 89
Crops stored 2/	29.0	26.1	24.0	26.2	22.9	18.0	19.5	21.9	22.6	23	21 to 24
Purchased Inputs	—	—	—	2.6	1.3	2.0	3.3	3.4	2.8	3	2 to 4
Financial assets	27.3	29.0	30.9	32.6	33.1	34.4	35.1	35.5	36.6	37	36 to 40
Total farm assets	982.4	945.6	945.2	858.6	773.5	724.3	773.9	803.0	817.1	838	845 to 855
Liabilities											
Real estate debt 3/	98.7	101.8	103.2	106.7	100.1	90.4	82.4	77.6	75.3	74	73 to 77
Non-real estate debt 4/	83.6	87.0	87.9	87.1	77.5	68.6	62.0	61.7	61.8	65	63 to 67
Total farm debt	182.3	188.8	191.1	183.8	177.6	157.0	144.4	139.4	137.1	139	137 to 143
Total farm equity	800.0	750.0	754.1	664.8	585.9	567.3	629.5	663.6	680.0	699	705 to 715
Selected ratios											
Debt-to-assets	18.8	20.0	20.2	22.6	23.0	21.7	18.7	17.4	16.8	17	16 to 17
Debt-to-equity	22.8	24.9	25.3	29.2	29.8	27.7	22.9	21.0	20.2	20	19 to 21
Debt-to-net cash income	556	498	424	630	371	336	257	240	251	240	240 to 260
Percent											

1/ As of Dec. 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contact: Ken Erickson or Jim Ryan (202) 219-0798.

Table 34.—Cash Receipts From Farm Marketings, by State

Region & State	Livestock & products				Crops 1/				Total 1/			
	1989	1990	Apr 1991	May 1991	1989	1990	Apr 1991	May 1991	1989	1990	Apr 1991	May 1991
	\$ million 2/											
NORTH ATLANTIC												
Maine	216	220	18	18	228	240	28	16	444	460	44	33
New Hampshire	85	63	8	6	73	71	8	5	139	134	13	11
Vermont	379	398	30	31	50	49	9	5	429	447	38	36
Massachusetts	113	116	10	10	321	303	21	17	434	418	31	28
Rhode Island	13	13	1	1	65	58	6	5	78	71	7	6
Connecticut	188	198	15	15	240	250	24	18	428	446	38	33
New York	1,937	1,983	146	154	917	1,023	83	70	2,854	3,008	230	224
New Jersey	197	198	18	17	484	452	40	36	862	847	57	54
Pennsylvania	2,611	2,714	210	214	992	1,053	88	72	3,602	3,787	295	286
NORTH CENTRAL												
Ohio	1,698	1,836	135	135	2,088	2,335	154	114	3,787	4,172	288	250
Indiana	1,828	2,060	150	156	2,456	2,871	164	148	4,281	4,931	315	304
Illinois	2,251	2,477	187	197	4,727	5,461	434	305	6,979	7,938	631	502
Michigan	1,311	1,398	104	104	1,611	1,785	117	91	2,923	3,183	221	195
Wisconsin	4,350	4,581	349	388	1,050	1,125	48	51	5,400	5,708	398	419
Minnesota	3,693	3,758	283	301	2,620	3,253	201	201	6,513	7,011	484	502
Iowa	5,293	5,882	422	398	3,755	4,437	348	301	9,049	10,319	770	697
Missouri	2,169	2,271	174	151	1,751	1,868	97	78	3,920	3,939	271	229
North Dakota	669	813	65	48	1,483	1,724	95	57	2,152	2,537	161	105
South Dakota	2,031	2,313	145	148	951	1,036	51	55	2,982	3,349	198	201
Nebraska	5,646	6,037	429	453	3,080	2,808	215	117	8,728	8,845	645	570
Kansas	4,416	4,896	433	422	2,132	2,099	104	81	6,548	6,995	537	503
SOUTHERN												
Delaware	503	460	39	43	159	184	10	8	862	844	49	51
Maryland	859	828	67	69	477	517	58	32	1,336	1,345	123	100
Virginia	1,345	1,379	115	102	694	741	28	24	2,039	2,120	143	127
West Virginia	250	269	23	21	60	70	2	2	310	338	26	23
North Carolina	2,510	2,653	211	212	2,082	2,214	71	79	4,593	4,867	282	291
South Carolina	554	577	48	46	680	599	22	23	1,235	1,178	70	69
Georgia	2,281	2,268	164	176	1,626	1,574	74	73	3,908	3,842	238	249
Florida	1,215	1,260	92	87	5,031	4,448	772	624	6,246	5,708	864	721
Kentucky	1,658	1,698	93	84	1,266	1,400	33	31	2,924	3,098	126	115
Tennessee	1,082	1,111	83	76	863	928	41	32	1,948	2,039	124	108
Alabama	1,975	2,083	181	182	696	655	37	35	2,671	2,737	198	197
Mississippi	1,295	1,322	100	109	981	1,111	56	38	2,276	2,433	156	145
Arkansas	2,661	2,706	217	212	1,496	1,553	42	34	4,157	4,259	258	246
Louisiana	614	637	49	50	1,094	1,264	40	38	1,708	1,921	88	86
Oklahoma	2,377	2,363	128	158	1,137	1,191	88	52	3,515	3,554	194	211
Texas	6,861	7,712	681	728	4,063	4,268	220	263	10,923	11,981	901	991
WESTERN												
Montana	928	864	85	54	825	742	55	48	1,554	1,606	120	101
Idaho	1,084	1,154	92	89	1,662	1,781	97	73	2,745	2,935	190	162
Wyoming	664	610	31	28	163	157	7	3	827	767	38	31
Colorado	2,649	3,029	218	226	1,321	1,184	64	59	3,960	4,213	280	285
New Mexico	974	1,046	64	68	485	483	18	30	1,459	1,529	82	98
Arizona	744	819	58	66	1,182	1,048	58	132	1,926	1,865	116	218
Utah	567	576	48	39	186	179	17	8	755	755	65	47
Nevada	142	218	19	21	102	115	9	5	244	333	28	26
Washington	1,233	1,396	107	118	2,457	2,420	199	152	3,689	3,818	306	270
Oregon	738	755	58	59	1,546	1,557	89	69	2,285	2,312	147	127
California	5,193	5,515	414	495	12,857	13,344	848	1,164	16,050	18,859	1,262	1,859
Alaska	9	8	1	1	20	19	1	1	29	27	2	2
Hawaii	92	88	7	8	483	499	41	41	585	588	48	49
UNITED STATES	84,131	89,823	6,787	6,979	76,761	80,364	5,405	5,014	160,883	169,987	12,193	11,992

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period. 2/ Estimates as of end of current month. Totals may not add because of rounding.

Information contact: Roger Strickland (202) 219-0806.

Table 35.—Cash Receipts From Farming

	Annual						1990		1991			
	1985	1986	1987	1988	1989	1990	May	Jun	Feb	Mar	Apr	May
\$ million												
Farm marketings & CCC loans*	144,114	135,303	141,750	151,082	160,883	169,987	12,281	15,548	11,181	12,722	12,193	11,992
Livestock & products	69,822	71,553	75,904	79,437	84,131	89,623	7,334	7,520	6,871	7,382	6,787	6,979
Meat animals	38,550	39,081	44,478	46,482	48,857	51,677	4,053	4,691	4,108	4,422	4,003	4,023
Dairy products	18,055	17,724	17,727	17,841	19,396	20,199	1,808	1,456	1,345	1,489	1,479	1,559
Poultry & eggs	11,209	12,701	11,518	12,868	15,372	15,270	1,300	1,180	1,080	1,296	1,130	1,225
Other	2,008	2,048	2,274	2,436	2,507	2,477	173	193	169	175	166	171
Crops	74,293	63,749	65,764	71,645	78,781	80,364	4,947	8,026	4,491	6,340	5,405	5,014
Food grains	8,999	5,741	6,776	7,467	8,247	7,978	349	735	251	302	291	304
Feed crops	22,591	18,011	14,576	14,298	17,081	19,116	1,214	2,461	1,178	1,356	1,308	1,092
Cotton (lint & seed)	3,687	3,371	4,189	4,546	5,040	5,234	148	758	377	252	204	150
Tobacco	2,699	1,894	1,818	2,083	2,415	2,738	0	421	41	1	18	0
Oil-bearing crops	12,475	10,814	11,283	13,500	11,866	12,403	581	1,484	742	846	652	518
Vegetables & melons	8,672	8,885	8,902	9,787	11,481	11,533	1,260	820	696	1,129	1,280	1,854
Fruits & tree nuts	6,946	7,252	8,062	9,204	9,257	9,306	407	640	487	465	420	342
Other	8,333	9,101	10,161	10,760	11,415	12,180	1,011	727	718	988	1,253	953
Government payments	7,704	11,813	16,747	14,480	10,887	9,298	652	63	493	1,745	1,238	1,054
Total	151,818	147,110	158,508	165,562	171,780	179,285	12,933	15,599	11,654	14,467	13,431	13,046

*Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 219-0808

Table 36.—Farm Production Expenses

	Calendar year											
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F	
\$ million												
Feed	20,855	18,592	20,371	20,230	17,247	17,875	17,958	20,620	22,722	22,000	21,000	to 23,000
Livestock	8,999	9,684	8,818	9,486	9,184	9,758	11,842	12,812	12,983	14,000	13,000	to 15,000
Seed	3,428	3,172	2,690	3,386	3,120	3,188	3,259	3,268	3,733	4,000	3,000	to 5,000
Farm-origin inputs	33,282	31,447	31,879	33,112	29,559	30,821	33,059	38,700	38,438	40,000	38,000	to 42,000
Fertilizer	8,409	8,018	6,950	8,574	7,506	6,813	6,453	6,775	7,554	7,000	6,000	to 8,000
Fuels & oils	8,570	7,734	7,211	7,296	6,436	5,310	4,957	4,921	5,321	6,000	5,000	to 7,000
Electricity	1,747	2,041	1,982	2,080	1,878	1,795	2,156	2,231	2,100	2,000	2,000	to 3,000
Pesticides	4,201	4,282	3,870	4,688	4,334	4,324	4,512	4,443	5,721	6,000	5,000	to 7,000
Manufactured inputs	23,927	22,078	20,022	22,618	20,153	18,242	18,077	18,370	20,697	21,000	20,000	to 23,000
Short-term interest	10,722	11,349	10,815	10,390	8,735	7,920	7,305	7,287	7,480	8,000	7,000	to 9,000
Real estate interest 1/	8,142	10,481	10,815	10,733	9,878	9,131	8,187	7,885	7,643	7,000	8,000	to 8,000
Total interest charges	18,864	21,830	21,430	21,129	18,613	17,052	15,492	15,172	15,123	15,000	14,000	to 16,000
Repair & maintenance 1/ 2/	7,021	6,428	6,529	6,730	6,556	6,485	6,828	6,889	7,794	8,000	8,000	to 9,000
Contract & hired labor	8,831	10,075	9,725	9,729	9,799	9,890	10,821	11,202	11,887	12,000	11,000	to 13,000
Machine hire & custom work	1,984	2,025	2,213	2,566	2,354	2,099	2,105	2,271	2,739	3,000	2,000	to 4,000
Marketing, storage, & transportation	3,523	4,301	3,904	4,012	4,127	3,852	3,988	3,281	4,214	5,000	4,000	to 6,000
Misc. operating expenses 1/	6,909	7,262	9,089	9,136	8,198	8,054	8,902	9,357	9,857	10,000	10,000	to 12,000
Other operating expenses	28,369	30,089	31,461	32,173	31,034	30,180	32,644	33,000	38,491	38,000	37,000	to 41,000
Capital consumption t/	23,573	24,287	23,873	21,623	19,648	17,709	16,475	16,718	17,310	18,000	17,000	to 20,000
Taxes 1/	4,246	4,050	4,123	4,186	4,484	4,549	4,982	5,090	5,328	6,000	5,000	to 8,000
Net rent to nonoperator landlord	8,184	6,174	5,110	8,978	8,435	6,951	6,984	7,014	8,181	8,000	8,000	to 9,000
Other overhead expenses	34,003	34,511	33,106	34,787	32,587	29,209	28,420	28,820	30,819	32,000	31,000	to 34,000
Total production expenses	139,444	139,954	137,897	143,819	131,026	125,503	127,693	132,063	142,566	146,000	145,000	to 150,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses include other livestock purchases & dairy assessments. Totals may not add because of rounding. F = forecast.

Information contact: Chris McGath (202) 219-0804, Robert McElroy (202) 219-0800.

Table 37.—CCC Net Outlays by Commodity & Function

COMMODITY/PROGRAM	Fiscal year									
	1983	1984	1985	1986	1987	1988	1989	1990	1991 E	1992 E
	\$ million									
Feed grains										
Corn	5,720	-934	4,403	10,524	12,346	8,227	2,863	2,450	2,411	3,811
Grain sorghum	814	78	463	1,185	1,203	764	467	361	261	315
Barley	268	89	336	471	394	57	45	-93	62	148
Oats	11	5	2	28	17	-2	1	-5	14	26
Corn & oat products	2	6	7	5	7	7	8	8	7	8
Total feed grains	6,815	-758	5,211	12,211	13,967	9,053	3,384	2,721	2,755	4,308
Wheat	3,419	2,538	4,891	3,440	2,836	678	53	806	2,817	1,863
Rice	684	333	990	947	906	128	631	667	758	698
Upland cotton	1,363	244	1,563	2,142	1,786	666	1,461	-79	392	431
Tobacco	880	348	455	253	-346	-453	-367	-307	-237	-79
Dairy	2,528	1,502	2,085	2,337	1,186	1,295	679	505	783	419
Soybeans	288	-585	711	1,597	-476	-1,676	-86	5	102	20
Peanuts	-6	1	12	32	8	7	13	1	-4	-3
Sugar	49	10	184	214	-65	-248	-25	15	-2	-27
Honey	48	90	81	89	73	100	42	47	23	18
Wool	94	132	109	123	162	1/ 5	93	104	173	198
Operating expenses 3/	328	362	348	457	535	614	620	618	634	724
Interest expenditure	3,525	1,064	1,435	1,411	1,219	425	98	632	757	573
Export programs 4/	398	743	134	102	276	200	-102	-34	567	1,322
1989/90 Disaster/										
Livestock Assistance	0	0	0	0	0	0	3,919	2/ 161	146	2
Other	-1,542	1,295	-314	488	371	1,665	110	609	905	1,446
Total	18,851	7,315	17,683	25,841	22,408	12,461	10,523	6,471	10,569	11,913
FUNCTION										
Price-support loans (net)	8,438	-27	6,272	13,828	12,199	4,579	-926	-399	267	434
Direct payments 5/										
Deficiency	2,780	612	6,302	6,166	4,833	3,971	5,798	4,178	6,203	6,695
Diversion	705	1,504	1,525	64	382	8	-1	0	0	0
Dairy termination	0	0	0	489	587	280	168	169	97	1
Other	0	0	0	27	60	0	42	3	14	16
Disaster	115	1	0	0	0	0	4	0	0	0
Total direct payments	3,600	2,117	7,827	6,748	5,862	4,245	6,011	4,370	6,314	6,712 ¹
1988/89 crop disaster	0	0	0	0	0	0	3,386	2/ 5	8	0
Emergency livestock/ forage assistance	0	0	0	0	0	31	533	156	138	2
Purchases (net)	2,540	1,470	1,331	1,870	-479	-1,131	116	-48	594	634
Producer storage payments	864	268	329	485	832	658	174	185	1	26
Processing, storage, & transportation	665	639	657	1,013	1,659	1,113 ²	659	317	299	213
Operating expenses 3/	328	362	348	457	535	614	620	618	634	724
Interest expenditure	3,525	1,064	1,435	1,411	1,219	425	98	632	757	573
Export programs 4/	398	743	134	102	276	200	-102	-34	567	1,322
Other	-1,607	679	-648	329	305	1,727	-46	609	990	1,373
Total	18,851	7,315	17,683	25,841	22,408	12,461	10,523	6,471	10,569	11,913

1/ Fiscal 1988 wool & mohair program outlays were \$130,835,000 but include a one-time advance appropriation of \$126,108,000, which was recorded as a wool program receipt by Treasury. 2/ Approximately \$1.5 billion in benefits to farmers under the Disaster Assistance Act of 1989 were paid in generic certificates & were not recorded directly as disaster assistance outlays. 3/ Does not include CCC transfers to General Sales Manager. 4/ Includes Export Guaranteed Program, Export Guaranteed Program-Credit Reform, Direct Export Credit Program, Market Promotion Program, & CCC Transfers to the General Sales Manager. 5/ Includes cash payments only. Excludes payment-in-kind in fiscal 83-85 & generic certificates in fiscal 86-90. E = Estimated in the fiscal 1992 Mid-Session Review based on June, 1991 supply & demand estimates. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Food Expenditures

Table 38.—Food Expenditure Estimates

	Annual			1991			1991 year-to-date		
	1988	1989	1990	May	June P	July P	May	June P	July P
\$ billion									
Sales 1/ Off-premises use 2/ Meals & snacks 3/	255.7 196.5	272.1 205.9	286.3 220.3	25.8 20.1	25.0 20.4	25.4 20.6	118.8 91.2	143.8 111.6	160.3 132.2
1990 \$ billion									
Sales 1/ Off-premises use 2/ Meals & snacks 3/	290.2 215.2	289.5 215.0	286.2 220.2	24.9 19.5	24.1 19.7	24.7 19.9	116.2 89.1	139.3 108.8	164.1 128.7
Percent change from year earlier (\$ bil.)									
Sales 1/ Off-premises use 2/ Meals & snacks 3/	4.8 8.7	6.4 4.8	5.2 7.0	5.5 5.5	1.6 4.4	4.3 4.8	3.4 3.7	3.1 3.8	3.2 4.0
Percent change from year earlier (1990 \$ bil.)									
Sales 1/ Off-premises use 2/ Meals & snacks 3/	0.6 4.4	-0.2 0.2	-1.1 2.1	0.9 2.0	-0.6 1.0	1.6 1.4	-0.4 0.0	-0.8 0.1	-0.5 0.4

1/ Food only (excludes alcoholic beverages). Not seasonally adjusted. 2/ Excludes donations & home production. 3/ Excludes donations, child nutrition subsidies, & meals furnished to employees, patients, & inmates. P = preliminary.

NOTE: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food not alcoholic beverages & pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced & consumed on farms & food furnished to employees; (4) this series includes all sales of meals & snacks. PCE includes only purchases using personal funds, excluding business travel & entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," Agr.-Econ. Rpt. No. 576, Aug 1987.

Information contact: Alden Manchester (202) 219-0880.

Transportation

Table 39.—Rail Rates; Grain & Fruit/Vegetable Shipments

	Annual			1990 Jun	1991					
	1988	1989	1990		Jan	Feb	Mar	Apr	May	June
Rail freight rate Index 1/ (Dec. 1984=100)										
All products	104.8	106.4	107.5	107.1	108.6	108.9	109.7 P	109.6 P	109.4 P	109.5 P
Farm products	105.6	108.4	110.4	109.5	111.5	111.6	112.3 P	112.4 P	111.7 P	111.8 P
Grain	105.4	108.7	110.1	109.2	111.0	111.0	111.8 P	112.0 P	111.1 P	111.2 P
Food products	103.2	103.9	105.4	104.5	107.6	107.7	108.1 P	108.3 P	108.1 P	108.2 P
Grain shipments										
Rail carloadings (1,000 cars) 2/	30.7	28.4	27.6	28.1	26.5 P	28.6 P	28.1 P	24.9 P	20.8 P	24.5 P
Barge shipments (mil. ton) 3/	3.2	3.3	3.8	4.5	1.6	2.0	3.1	4.0	3.7	3.6
Fresh fruit & vegetable shipments 4/ 5/										
Piggy back (1,000 cwt)	535	502	421	635	277	316	277	248	320	538
Rail (1,000 cwt)	607	600	532	876	495	410	407	334	527	773
Truck (1,000 cwt)	9,878	9,745	9,582	13,609	8,251	8,753	9,110	9,841	9,465	11,329
Cost of operating trucks hauling produce 6/										
Fleet operation (cts./mile)	118.4	123.4	130.5	125.8	135.8	130.5	128.5	128.1	127.6	124.6

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Shipments on Illinois & Mississippi waterways, U.S. Corps of Engineers. 4/ Weekly average; from Agricultural Marketing Service, USDA. 5/ Preliminary data for 1990 & 1991. 6/ Agricultural Marketing Service, USDA.

Information contact: T.Q. Hutchinson (202) 219-0840.

Indicators of Farm Productivity

Table 40.—Indexes of Farm Production Input Use & Productivity

(See the June 1991 issue)

Information contact: Jim Hauver (202) 219-0432.

Food Supply & Use

Table 41.—Per Capita Consumption of Major Food Commodities¹

(See the August 1991 issue)

Information contact: Judy Jones Putnam (202) 219-0870.

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